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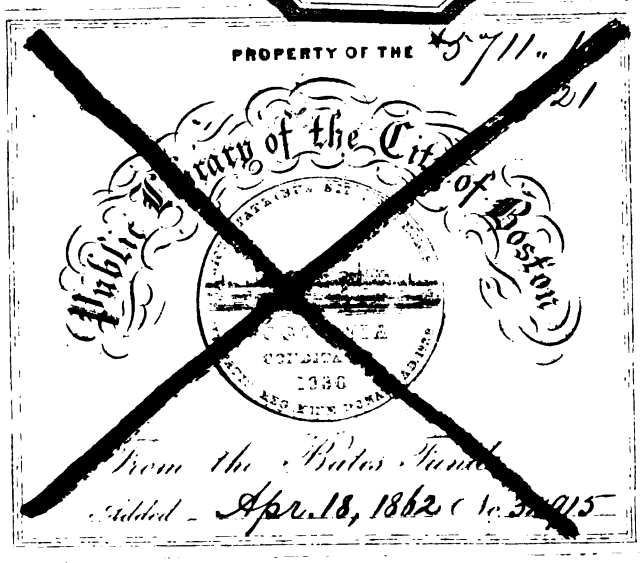

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ORIGINAL LECTURES.

LECTURES
ON
OPERATIVE OPHTHALMIC SURGERY.
DELIVERED AT THE CENTRAL LONDON OPHTHALMIC HOSPITAL.

By H. HAYNES WALTON, Esq., F.R.C.S.,
Surgeon to the Hospital, and to the St. Pancras Royal General Dispensary.

LECTURE VIII.

Capsular Cataract, the Treatment of, considered under heads of Partial Capsular, the Lens Transparent, or Opaque.—Complete Capsular, enclosing a Lens.—Capsular only—first, unbroken; secondly, more or less torn or broken.—Invention of a New Instrument for the Removal of Capsule.—Operation of Drilling.—Concluding Remarks at the end of the First Course.

GENTLEMEN,—I proceed to-day with the treatment of capsular cataract, and I shall arrange it conformably to the classification of capsular disease that I adopted in my second Lecture.

Partial Capsular Cataract, the Lens Transparent, or more or less Opaque.—Very rarely, indeed, is the capsule alone so extensively opaque as to interfere with vision; but nearly always with the existence of capsular opacity, the lens is involved to a corresponding, or may be, to a greater amount.

Whenever the functions of the eye are interfered with by partial opacity, whether it be seated in the capsule or in the lens, or in both conjointly, the pupil should be dilated, and if, happily, useful sight be thereby acquired, no surgical measure is expedient. But, should little or no advantage accrue from the enlarged pupil, the seat of the opacity must be removed.

Some years ago I saw a housemaid with capsulo-lenticular cataract in each eye. I was induced to question her, because the pupils were considerably dilated. She was then 18 years old; since childhood a drop of belladonna solution had been daily applied to each eye. With undilated pupils she was nearly blind. Her employers were totally unaware of her defect.

An occasional patient at this Institution, a watchmaker, aged 74, with partial capsulo-lenticular cataract in his right eye, has been using belladonna for the last eight years, the period of the cataract's duration. From long application of the working glass to that eye, he cannot proceed well with his work when he shifts the glass to the other, which he is forced to do with the pupil of the right eye in a natural state, but when dilated, he can adopt his old habit of applying the glass to it, and works with ease. Shortly after I began practice I obtained great credit by thus advantageously employing belladonna in a little girl, whose eyes had been condemned for operations.

Complete Capsular Cataract enclosing a Lens.—I told you in a former Lecture that an opaque capsule never encloses a transparent lens; therefore if the lens has not been removed, there must, of necessity, be capsulo-lenticular cataract. When the capsule is but slightly opaque, there is so little change in its physical properties, that you proceed with whatever operation you may have selected, as if it were transparent. If you extract, it will in due time contract, and either leave a clear pupil, or one sufficiently clear for the purposes of vision. Exceptions will be alluded to as I pass on. The manner in which it has been rent for the escape of the opaque lens involves a practical point; if it have been across the centre, the retraction is easier accomplished, and a larger space obtained, in the most favourable situation for the exercise of sight, than if divided near the margin.

When the operation for solution is performed there can be no doubt it would be most desirable in all cases, the first time the needle is used, to divide the capsule completely across, because it is then less tough, would contract better, and is less likely to inflame and unite than at any subsequent period; but I have shown, that it is only when the cataract is fluid that such an advantage can be embraced, and hence there is such frequent necessity for after-operations to clear the pupil.

When the capsule becomes very much thickened, its contents are sure to undergo considerable reduction, and a mere scale of lens, or little soft, white matter, not unlike half-boiled rice, may be all that is present. Such cataracts have a shrivelled appearance, and the posterior chamber is large. The ordinary mode of operating is not applicable; the object now is, to get rid of the capsule. When a cataract forms after childhood, and arrives at such a state, there is much probability of the eye being otherwise unsound.

In the adult, and, indeed, whenever the patient is controllable, the best adapted operation is extraction. It has been recommended to detach the capsule by a posterior operation, and place it in the anterior chamber as a means of facilitating extraction. If such a preliminary be necessary, I think, that it would be far superior for the safety of the eye were it effected by a curved needle through the cornea.

In all the cases with which I have been personally concerned the operation has been performed as if for extraction of a lens; in some the capsule has escaped with slight pressure on the globe; in others, it has been necessary to introduce a hook, and withdraw it. It is in congenital cataract that we see the most frequent and best-marked examples of these adventitious changes in the capsule, and morbid alterations in the lens.

In childhood, and in early life, the practice I have pursued is to use the needle as for solution, in order to produce absorption of whatever may remain of the lens. I then wait to see if the capsule sufficiently contracts to enable the patient to see. If that fails, I endeavour to clear the pupil with the needle. Sometimes it may be advisable to attempt to make a central aperture, after "the manner of Saunders. I prefer a larger needle than he employed, which was the same as he used for solution, and is known as Saunders's needle;" the anterior operation is the better. Perhaps you are not aware, that I am directing you to execute a difficult task, and one that may require several attempts before it is perfected, or in which you may altogether fail.

In January, 1846, I was consulted by a female who had been under Saunders with congenital cataracts, and in whom he carried out this operation. The capsules must have been very thick, for, according to the testimony of the patient's mother, he operated on the one eye eleven times, and on the other, nine; and yet it was only in one that a sufficient aperture was made. Her sight was very imperfect.

I have cautioned you to be careful never to use the needle in the operation for solution too freely on any one occasion; and the same must be attended to in all needle operations. It is nevertheless essential, always to be as effectual with it as possible; and this applies in an especial manner to operations on opaque capsules. It is bad to create a necessity for the repetition of any operation from an indecisive or ineffectual measure. Before I pass to the next head, I will just remark, that it would be improper to attempt the removal of opaque capsule, unless it is obvious that it interferes with the exercise of vision.

Capsular cataract only, or secondary cataract, as it is often called, is found in two states. In the one, the capsule is unbroken, the lens having been absorbed by Nature's unaided effort. In the other, it is more or less torn, the consequence of some previous operation for the removal of the lens, or the result of accident.

The first much resembles the condition of capsulo-lenticular cataract with thickened capsule, and reduced lens, but differs from it, since the latter is, so far as I have seen, always opaque in its posterior as well as its anterior position, which is by no means the case with the former. I think that, as a principle, you should always endeavour first to make a central aperture in opaque capsule, when it completely retains its natural attachments, and, consequently, entirely fills up the pupil behind. The success of the attempt will depend as much, or more, on the firmness with which those connexions are maintained, than on its texture; for, even when very thin, it will often yield under slight pressure, and again return to its place. The formation of a central opening is scarcely practicable when any portion of the capsule is detached. Undoubtedly, extraction is the proper course, when an aperture cannot be made. It is evident, that no treatment can equal that which can at once remove the capsule; the only question involved is, the practicability; for it has always been considered a thing difficult to accomplish, and dangerous in the result. The vitreous humour, having lost its support, and its structure being mostly broken, is apt to escape under the necessary manipulation. I am happy to say, that these remarks apply to the past, and not to the present time; for Mr. Weiss has manufactured a little instrument, a very delicate kind of forceps, by which it may be removed with perfect security to the eye, as well as ease to the operator; and, had such means always been within my reach, I should often have extracted, instead of having resorted to the uncertain method of tearing through the capsule in some manner or other, in endeavouring to get a clear space, or entirely or partially detaching it, and trusting to its rolling up,—an event far from certain.

Here is the instrument. When closed, it is scarcely larger than an ordinary sewing needle, and capable of entering a small puncture in the cornea. After its point is well introduced, the blades are thrust out, the capsule is then easily seized, secured, and withdrawn. The contrivance for opening and closing the blades is simple:—

Certainly, I have not yet had much experience with this "wee pet," as a friend calls it; but, in every instance of its employment, it has fully realised my expectations. I shall briefly sketch the first case in which I used it. There had been soft cataract, and the operation was that for the solution; the anterior part of the capsule, alone opaque, had retracted somewhat from its circumferential attachment, but still maintained communication by slight bands, which I suppose were portions of capsular ligament. I passed a broad needle through the cornea, and separated the greater number of the bands of connexion, when the capsule contracted to a mass at the upper part of the pupil, a portion of it being in each chamber. The forceps were then introduced, it was seized, twisted to free it entirely, and withdrawn. I do not consider the previous use of the needle actually necessary. An entire capsule also may be removed with much facility, and much better than with a hook; the opening in the cornea should always be in proportion to the size of the body to be extracted, but *need never* exceed it. It may be advantageous to have a larger instrument, with a greater span, and with broader claws. I have given Mr. Weiss an order for such a one. That in young persons, and in children, the capsule may, in this manner, be extracted, and a great boon conferred on them, I am sure. How immeasurably superior to digging a hole in it! Heretofore, when a capsule was to be removed, the imperfect forceps that we possessed, required, for their efficient use, a large opening in the cornea,—a measure objectionable at all times, but insuperable, when a patient does not possess self-control. There is a variety of other forceps, very ingenious, and very expensive, yet most of them are absolutely worthless.

The second state in which capsular cataract is met with, more or less torn or broken, is the more common form, and the more difficult to treat. When its integrity is destroyed, it has less tendency to contract at its circumference, and to lose its attachments. These cases differ so widely from one another, that it is difficult to lay down rules of treatment for your guidance. Their unmanageableness often obliges the operator, during the operation, materially to alter his original intention of proceeding, and adopt some other course. Try first to separate, with a sharp needle, any bars or bands that cross or obscure the pupil: if they yield to the pressure employed, and will not sever, use the forceps. It would be very improper to apply the needle directly to the circumference of the capsule —I mean at its ciliary attachment—and, as it were

to scrape or rake it away. When partially free portions are obscuring the pupil, they may be seized with the forceps and torn off, or the forceps may be twisted till there is a separation somewhere.

To attempt to depress capsule is nearly always to undertake an impossibility. It will not remain imbedded in the vitreous humour if it be healthy; if otherwise, it will float about, and produce inconvenience; and then its removal would be dangerous; for an eye in that state cannot bear much injury.

Adhesions to the iris greatly increase the difficulty of clearing the pupil. They are not easily overcome unless they are very slight; the iris will sometimes give way from its ciliary attachments rather than at the adherent spot. Paralysis, that is, tremulousness of the iris, not unfrequent after any operation on the capsule, is very liable to ensue when it is adherent, from the concussion that the iris necessarily receives; wherefore the greater care is demanded. It is certainly legitimate, to attempt to separate adhesions by force exerted through the medium of the capsule. But it is less applicable, and hence less practicable, than the ophthalmic student would suppose, Considerable experience in ophthalmic operations is needed to enable you to know when to attempt it, and how to do it with safety; a Lecture cannot teach you how long to persevere, or when to desist. I have found a curved needle better suited for the purpose than a straight one.

Capsule that has been divided may inflame and unite, and render nugatory what has been done. In a female who had undergone extraction there was prolapsus of the iris; and the irregular pupil that resulted was closed above by opaque and thickened capsule, the remaining aperture not being sufficiently large to admit of useful sight. The left eye was dark from lenticular cataract. In this state she applied to me, requesting that my attention should be directed to the right eye, and positively refusing to have the left touched. Had the capsule been unadherent, its removal might have been easily effected from its situation at the margin of the cornea; but, as things were, to draw it out would have been to pull out the iris as well. Its adhesion could not be destroyed. I divided it perpendicularly, in the hope that the edges might in some manner separate. Three successive divisions were followed by adhesive inflammation. Then I tried to cut out a bit of it, but fruitlessly, yet the attempt was not without a result; for a new aperture was made that did not close, and, although small, was well situated and fully satisfied the patient; had the last trial been as unhappy as the foregoing ones, I would have operated on the iris as for artificial pupil.

The iris should always be fully under the influence of belladonna, when capsular operations are undertaken.

DRILLING.

I have yet to say what is to be done when extensive or entire adhesion of the iris to a capsulolenticular cataract renders the usual operations inapplicable.

Before Mr. Tyrrell's time the practice was to divide the lens, its capsule, and the iris after the manner of Maunoir; but its frequent failures induced Mr. Tyrrell to seek for other treatment. He ultimately adopted the operation for solution, but with such modification as to serve the additional purpose of effecting an efficient aperture in the capsule; the term drilling was given to the process. According to the author's direction for its execution, a very fine and straight needle is inserted into the substance of the lens for about the sixteenth of an inch, and rotated to act like a drill. Each time that it is used, it should be introduced through a different place in the capsule, that a portion of the capsule may be detached, or sufficiently weakened, to admit of being easily displaced when the lens has disappeared. Solution and absorption must be much advanced, by admitting the aqueous fluid to several portions of the lens, an advantage that renders drilling applicable when the lenticular cataract is hard. The capsule being unyielding, and the punctures in it small, fragments of the lens cannot escape and do mischief.

Mr. Tyrrell usually repeated the operation every three, four, or five weeks, and on an average from seven to eight times before he was satisfied that the lens was removed. I believe such frequent repetitions to be useless and dangerous; in the young it can never be required, and is at variance with Mr. Tyrell's accustomed practice in operations on soft cataract. In the middle-aged and in the old it is too often, and especially if what Mr. Tyrrell conjectured be true, and which I fully admit, that the lens has not generally, even in elderly persons, the hard character of the ordinary cataract; but then he does not attribute the want of hardness to the right cause. If you refer to the passage to which I allude, you will see that he considers hard cataract to be an increase of density of a lens, and not, as I have told you, merely opacity pervading the hard lens of an old person; and he thinks that even should the lens be opaque in connexion with the capsular disease, it is not hard cataract; whereas I say, it is in consequence of the disease in the capsule, whereby it is thickened, that the density of the lens is not retained, and the lens degenerates and is more or less absorbed. I prefer, therefore, to operate less often, and increase the length of the intervals; for if time be allowed, three or four, or even fewer operations will suffice; and when I think that the lens is gone, I endeavour to effect with a broader needle, at one operation, all that is possible to be effected in the clearing of the pupil. One of the proofs of the removal of a lens, and the only one that can be observed or estimated when the pupil is closed—the concavity of the iris and the increased size of the anterior chamber—is not always present; I may say, is rarely present. Any knowledge of the presence of a soft or of a degenerated lens, or of the fragmentary remains of a hard one, can scarcely, if ever, be ascertained by the amount of resistance that may be offered to a sharp, fine needle. As far as I know, it is only by the performance of a certain number of operations, sufficient to secure a proper exposure of the lens to the action of the aqueous humour, and the allowance of sufficient time for absorption, that we can be certain of the empty state of the capsule. By reducing the number of operations we reduce the chances of failure,—a very material point at any time, but most important here; for an eye that is in a state to require drilling has been much damaged by inflammation, and is therefore less able to resist injury. Remember what I told you in my last Lecture respecting a principal cause of imperfection in solution cases; and the observations carry double force when an eye is unhealthy. Mr. Tyrell has overlooked the effect of frequently repeated operations on an unsound eye. For his argument is, that he believed the sensibility of the retina had been previously and permanently injured in those cases in which he failed to restore sight, because he disposed of the cataract, and cleared the pupil enough to afford good vision, had the retina been healthy. Giving a fair allowance for previous injury to the nervous apparatus, some portion of the ill success of which he speaks must, I am sure, be transferred to the account of the operations.

The superiority of any mode of operating must rest entirely on the results,—on the greatest amount of benefit conferred, with the longest continuance of it; and to ascertain which, should constitute the principal part of your study of operative surgery.

It is by no means certain that the needle alone will clear the pupil; it is, therefore, better that its inability be ascertained at once than after frequent trials, putting out of consideration the disadvantage of having to repeat punctures because previous ones have healed.

Whether the operation shall do more than remove the lens, must depend, 1st, on the density of the capsule,—for, if it be very thick and tough, it may not be possible to effect a patent aperture; 2nd, on the size of the closed pupil, because a very small one may not be sufficiently large, even could we succeed in the removal of the entire capsule. Certainly, in the greater part of the cases that I have seen, the pupil has been partly cleared by the capsule giving way from some portion of its adhesion, and contracting or floating aside. The idea just occurs to me, that the new forceps may be found useful in completing the detachment. It should be employed with great care. I suspect that capsule will separate easier from an iris that has lost its natural structure than from a healthier one.

When the aperture acquired is not sufficient, or when one cannot be made with safety by means of the needle, an artificial pupil must complete your proceedings.

My own impression is that, except when the pupil is of good size, and nearly or entirely cleared, there are few cases that would not be benefited by an artificial pupil. I believe it to be absolutely essential in all cases where the capsule is opaque posteriorly. Want of time prevents my illustrating the subject with cases from my own practice. I may, however, refer you to one that I published in the *Medical Times*, about eighteen months or two years ago. I am sorry that I cannot recollect the date.

Drilling is certainly a valuable addition to ophthalmic surgery, although, if regarded comprehensively, it must be received principally as a means of getting rid of an opaque lens, and, as such, a preparatory step for the formation of an artificial pupil.

It is only when the eye is free from active or from low inflammation that you should operate. I have no hesitation in saying, that the four cases Mr. Tyrrell has published in illustration of drilling are selected ones, chosen to display a superior result. I would recommend you to read them, for they are instructive.

And this, gentlemen, ends what I had to say on the subject of capsular cataract. The first part of my course also ends here. My lectures, it is true, might have been condensed, but then ideas and facts, which I deem of importance, could not have been developed so as to render them easy of comprehension; but, by amplifying a little, I have endeavoured to make them familiar, and I have, I trust, thus succeeded in impressing them on your memory. In conclusion, I beg of you to remember, that when I have criticised the opinions of authorities deemed standard, I have only exercised the right of private judgment, and, as that was founded on my own experience, it was my duty to point out these differences.

ORIGINAL CONTRIBUTIONS.

STATISTICS OF MORTALITY IN LONDON, FOR THE YEAR 1849.

By Mr. BENJAMIN SMITH.

The past year, fruitful alike in political and social events, will be marked in future history, like 1832, as the year of cholera; one in which, by a single disease not prevalent at other times, 14,000 deaths were superadded to the general rate of mortality, the particulars of which have been already recorded in this Journal (Nov. 3rd, 1849).

The total deaths in the year from all causes amount to 68,432, being an increase over those of 1848 by 10,533. This result would show that, deducting the mortality from cholera, the deaths from other causes in 1849 were 54,327, or 3572 under those of the former year, although that year numbered 468 deaths from cholera in the thirteen weeks from Oct. 7th to Dec. 30. The effect, as to population, of the high rate of mortality, has been that the Births have been over Deaths by only 3626 (although the total for the year is 1027 over that of its predecessor), whereas in 1848, an increase of population accrued of 13,104.

The following shows the rate of mortality in the districts of the Metropolis, compared with that of 1848.

	1848.	1849.
West	8,118	9,387
North	10,309	11,053
Central	9,653	10,845
East	13,009	14,847
South	15,496	22,318

A comparison of ages at Death with the former year gives the following:—

	1848.	1849.
Age from 0 to 15	28,423	29,978
„ 15 to 60	18,663	25,091
„ 60 and upwards	10,385	12,979

This shows the following result:—The excess of Deaths in the first period is 1555; in the second, 6428; and in the third, 2594; thus showing the weight of the Cholera epidemic upon the period from 15 to 60 years of age.

The other phenomena attending the year's mortality will be seen by the following Table, for the latter half-year of 1849. (a)

(a) The Table of the previous half-year is given in the *Medical Times* of August 4, 1849.

METROPOLIS.

TABLE showing the BIRTHS and DEATHS for the Second HALF-YEAR of 1849, the several DISEASES, BIRTHS and DEATHS of MALES and FEMALES, AGE at DEATH, the DISTRICTS in which the DEATHS occurred, the TEMPERATURE and METEOROLOGY, and the INCREASE or DECREASE of POPULATION.

DATE.	ZYMOTIC* DISEASES.		SPORADIC DISEASES.															BIRTHS.		DEATHS.				BIRTHS OVER DEATHS.	AGES AT DEATH.			DISTRICTS.					Mean Height of BAROMETER.	THERMOMETER.		Difference between the Temperature of the week and the same week on an average of 7 years.	General Direction of the Wind.	Amount of Horizontal Movement of the Air.	Rain in Inches.
WEEKS ENDING	All.	Cholera.	1.*	2.*	3.*	4.*	5.*	6.*	7.*	8.*	9.*	10.*	11.*	12.*	13.*	14.*	15.*	16.*	Males.	Females.	Males.	Females.	TOTAL BIRTHS.	TOTAL DEATHS from All Causes.		0 to 15	15 to 60.	60 and upwards.	West.	North.	Central.	East.	South.		Dry.	Dew Point.				
1849.																																Inchs.	°	°	°		Miles	
JULY 7	393	153	36	173	115	38	87	68	8	11	6	1	1	16	26	32	17	38	635	642	566	504	1277	1070	207	495	399	174	130	196	183	194	367	29·799	62·7	48·3	+ 1·2	S.S.W.	440	0·00
„ 14	630	339	42	204	106	28	108	60	10	10	7	3	3	21	33	36	15	53	634	592	702	667	1226	1369	— 143	601	546	221	206	211	225	257	470	30·129	66·8	52·3	+ 5·4	N.N.E.	290	0·00
„ 21	1002	678	39	206	117	36	87	67	17	8	6	1	4	29	35	34	19	30	619	594	903	838	1213	1741	— 528	778	700	262	228	235	250	295	733	29·692	60·5	51·1	— 0·3	Variable	705	0·59
„ 28	1175	783	38	188	126	45	86	75	10	11	7	1	5	25	52	34	16	38	689	624	952	979	1313	1931	— 618	845	770	315	206	278	274	344	829	29·598	58·9	52·8	— 2·2	S.W.	720	2·15
AUG. 4	1308	926	41	164	110	50	85	64	11	3	5	1	1	30	18	37	12	23	703	690	993	974	1393	1967	— 574	833	818	316	205	227	265	332	938	29·793	59·5	49·9	— 1·9	Variable	759	0·39
„ 11	1182	823	42	173	118	26	102	74	15	6	9	...	6	32	33	39	8	33	621	638	948	961	1259	1909	— 650	805	795	308	197	267	275	378	792	29·766	66·4	55·1	+ 4·9	S.W.	420	0·24
„ 18	1595	1230	40	149	115	35	83	54	12	6	6	1	2	26	31	45	7	22	676	658	1116	1114	1334	2230	— 896	835	974	390	231	272	307	587	833	29·678	60·3	51·0	— 1·1	S.W.	1008	0·19
„ 25	1712	1272	52	182	108	32	93	77	8	10	4	...	7	34	37	48	7	39	664	653	1170	1286	1317	2456	—1139	907	1107	440	282	363	365	651	795	30·076	62·9	53·6	+ 2·6	N.W. & W.S.W.	310	0 01
SEPT. 1	2069	1663	52	165	135	33	94	72	5	9	6	1	2	25	32	52	15	27	632	595	1321	1475	1227	2796	—1569	992	1318	483	353	309	386	712	1036	29·772	64·0	54·0	+ 3·7	Variable	550	0·52
„ 8	2469	2026	40	162	120	30	85	73	15	14	7	2	7	34	37	50	10	26	636	663	1460	1725	1301	3183	—1882	1132	1498	552	334	332	415	660	1449	29·884	64·1	54·8	+ 5·3	N.	485	0·63
„ 15	2159	1682	40	170	115	20	76	67	14	8	3	3	5	46	41	42	17	33	663	639	1351	1514	1302	2865	—1563	1088	1292	482	347	345	373	600	1200	29·464	56·5	48·9	— 3·2	S.and W.	560	0·63
„ 22	1291	839	32	163	132	34	97	52	11	11	9	1	3	20	42	52	3	12	741	659	918	1063	1400	1981	— 581	816	788	363	215	277	271	449	769	30·155	55·7	45·3	— 1·2	N.E.	335	0·11
„ 29	782	434	46	167	114	48	128	58	7	11	9	...	3	26	36	57	39	76	787	739	825	786	1526	1611	— 85	675	627	308	224	257	260	375	495	29·680	58·4	53·4	+ 5·4	Variable	355	0·69
OCT. 6	608	288	44	140	101	23	123	76	9	6	12	3	5	24	35	48	5	22	631	551	622	668	1182	1290	— 108	625	439	224	179	194	215	317	385	29·374	51·2	46·6	— 1·8	Variable	490	2·20
„ 13	372	110	56	157	89	34	138	52	13	13	6	1	1	39	35	41	12	14	658	613	510	565	1271	1075	196	501	366	206	145	176	156	269	329	29·540	46·7	39·3	— 4·7	Variable	520	0·74
„ 20	277	41	34	165	126	27	145	67	13	6	5	3	4	24	39	42	10	40	715	648	524	504	1363	1028	335	496	333	197	163	172	169	248	276	29·893	52·4	45·2	+ 3·6	Variable	640	0.24
„ 27	229	25	36	139	108	41	132	58	11	16	6	2	1	19	25	39	8	32	686	642	442	460	1328	902	426	416	292	194	112	154	133	241	262	29·865	55·0	51·1	+ 9·6	S.W.	810	0.19
NOV. 3	214	11	37	162	93	28	120	48	13	8	2	1	3	16	21	38	10	20	712	704	404	433	1416	837	579	416	251	169	117	167	151	180	222	29·807	50·3	44·6	+ 4·1	Variable	500	0·00
„ 10	216	6	47	148	104	38	143	41	10	9	9	...	3	23	26	42	7	22	698	715	460	433	1413	893	520	448	266	178	142	150	146	190	265	29·732	50·2	44·3	+ 4·1	S.W.	950	0·13
„ 17	204	8	43	166	108	33	134	50	7	6	8	5	2	21	21	28	14	26	613	613	427	451	1226	878	348	415	290	172	112	165	166	202	233	29·863	45·2	41·0	+ 1·0	Variable	835	0·55
„ 24	176	2	54	147	101	40	170	56	9	8	4	1	3	13	26	35	13	14	778	679	425	467	1457	892	565	411	278	187	148	137	130	229	248	29·753	43·3	39·6	— 0·2	N.E.	500	0·37
DEC. 1	173	1	45	170	118	34	194	50	8	12	8	...	8	20	24	45	5	14	668	623	489	442	1291	931	360	409	325	196	147	162	151	218	253	29·803	34·5	31·2	— 9·1	Variable	455	0·60
„ 8	203	...	61	170	126	50	203	61	11	12	9	2	...	25	18	54	8	36	710	628	539	514	1338	1053	285	431	358	264	147	202	180	224	301	29·419	42·2	39·1	+ 1·4	Variable	695	1·32
„ 15	180	1	42	163	114	39	219	51	14	7	16	3	3	19	15	46	23	44	663	647	487	515	1309	1002	307	440	336	226	164	195	171	207	265	29·852	40·0	37·7	+ 0·4	Variable	590	0·39
„ 22	197	1	36	156	131	39	227	50	10	4	11	2	2	25	33	45	31	41	682	671	530	513	1353	1043	310	476	316	250	149	206	164	223	301	29·952	42·3	37·8	+ 2·5	Variable	1250	0·45
„ 29	176	...	58	152	135	40	185	43	15	17	2	2	4	25	21	51	45	77	618	608	540	518	1226	1053	273	442	362	244	155	186	206	239	267	29·87[illegible]	33·1	27·7	— 5·1	Variable	725	0·02
Total of 2nd half-year	20990	13321	1133	4306	2985	921	3344	1564	285	242	152	40	89	657	797	1112	374	852	17533	16730	19621	20362	34261	39986	—5725	16748	15241	7331	5037	5835	5986	8821	14325							
Total of 1st Half year	7323	784	1196	4681	3257	1016	4898	1575	300	224	213	35	83	599	535	1127	339	842	19377	18392	14408	14038	37769	28446	9351	13230	9250	5648	4350	5218	4859	6026	7993							
Totals for the year	28313	14105	232[illegible]	8987	6242	1931	8242	3139	585	466	395	75	172	1256	1332	2239	713	1694	36910	35122	34032	34400	72030	68432	3626	29978	25091	12979	9387	11053	10845	14847	22318							

* Under the head "Zymotic Diseases" are included :—Small Pox, Measles, Scarlatina, Hooping Cough, Croup, Thrush, Diarrhœa, Dysentery, Cholera, Influenza, Purpura and Scurvy, Ague, Remittent Fever, Infantile Fever, Typhus, Metria (or Puerperal Fever), Rheumatic Fever, Erysipelas, Syphilis, Noma or Canker, and Hydrophobia.

Under the head "Sporadic Diseases" 1. includes Dropsy, Cancer, and other diseases of uncertain or variable seat. 2. Tubercular Diseases. 3. Diseases of the Brain, Spinal Marrow, Nerves and Senses. 4. Diseases of the Heart and Blood-vessels. 5. Diseases of the Lungs and of the other Organs of Respiration. 6. Diseases of the Stomach, Liver, and other Organs of Digestion. 7. Diseases of the Kidneys. 8. Childbirth, Diseases of the Uterus, &c. 9. Rheumatism, Diseases of the Bones, Joints, &c. 10. Diseases of the Skin, Cellular Tissues, &c. 11. Malformations. 12. Premature Birth and Debility. 13. Atrophy. 14. Age. 15. Sudden. 16. Violence, Privation, Cold, and Intemperance.

The five Districts of London enumerated in the foregoing Table are as follow:—The West District comprises Kensington; Chelsea; St. George, Hanover-square; Westminster; St. Martin's-in-the Fields; St. James. (Population, 309,711; area, 17·2 square miles.) The North—Marylebone: St. Pancras; Islington; Hackney; Hampstead. (Population, 375,971; area, 20·5 square miles.) The Central—St. Giles and St. George; Strand; Holborn; Clerkenwell; St. Luke; East London; West London; City of London. (Population, 373,605; area, 2·8 square miles.) The East—Shoreditch; Bethnal Green; Whitechapel; St. George-in-the East; St. George, Southwark; Newington; Lambeth, Wandsworth, and Clapham; Camberwell; Rotherhithe; Greenwich; Lewisham. (Population, 502,548; area, 66·2 square miles.) Total Population, including 3,090 Police on duty, 1,948,369. Total area, 115·5 square miles.

ON A NEW PROPERTY OF GASES.

By Professor T. GRAHAM, F.R.S.,
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The existence of an atmosphere around the globe, and the unceasing intervention of air in an endless variety of phenomena, both of the organic and inorganic kingdoms, give an important bearing and interest to everything that can be learned respecting the gaseous constitution. Compared with solids and liquids, too, matter in the form of gas is susceptible of small variation in physical properties, and exhibits only a few grand features. The differences of property, which are preserved amidst the prevailing uniformity of gases may well, therefore, be supposed to be among the most deep-seated and fundamental in their nature with which matter is endowed; — they form the pillars of molecular theory, while they also pervade and give support to the sciences of external nature.

The little varied proportions in which gases combine, by measure, so often that of actual equality of volume, are among the ultimate facts of chemistry. The densities also of gases exhibit constant relations, in which their atomic weights or equivalent numbers are directly reflected. Indeed, these weights may themselves be based upon the densities.

The diffusive tendency of gases does not imply a difference in density between two gases which, as they touch, spontaneously intermingle under the influence of an irresistible impulse. But the comparative rapidity of the process depends, as is well known, entirely upon density, being slowest with the densest gases. Oxygen, however, which is sixteen times heavier than hydrogen, is only four times less quickly diffused than the latter gas; the general law being, that the time required for equal diffusion is at the *square-root* of the gas's density. No mechanical property of matter exhibits in a stronger light its inherent activity. Allow two, three, or ten gases to communicate together by the minutest chink or channel, their molecules are in instant movement, and restless till they have pervaded one another, and each attained the greatest possible dispersion; and a final uniformity of composition is thus produced. We see at work a principle of change, which ends in a fixed disposition and arrangement of the gaseous molecules—a structure in its most rudimentary aspect. Analogy would lead us to conclude, that the molecules of a single isolated gas, are not more at rest than mixing gases, but in constant movement among themselves; the movement being of that balanced kind, in which no force is exhausted, like vibrations or circular gyrations, and which may, therefore, be perpetual. We have, in life, such active powers of matter controlled and directed into certain channels.

This diffusion of gases in the atmosphere carries to plants their food from the most distant sources. It is to plants the substitute for locomotion.

Different gases are forced by pressure through a minute aperture in a thin plate, like a pin-point in a sheet of platinum foil, in different times, which, however, are the same as the relative times of diffusion of the same gases. The "effusion" of a gas is thus governed by the same relation to density as its diffusion, as was anticipated in the received theory of the movements of fluids.

The passage of gases through capillary tubes, instead of apertures in plates, presents results, however, which are entirely novel and wholly unprovided for in the received view of the gaseous constitution, of which, indeed, they prove the incompleteness. They appear to depend upon a peculiar property of gases, which I have, therefore, ventured to distinguish by a new name, the Transpiration or Transpirability of Gases. It is the character of gases in respect of this property, which it is my object shortly to explain in the present communication, referring for the details of my experiments on the subject to a paper in the first part of the Philosophical Transactions for 1849, which is now passing through the press.

As the capillary, or instrument of transpiration, the finest thermometer tube procurable may be employed, of either a round or flat bore, in a length of twenty or thirty inches; or a short piece of the same tube is softened at the blow-pipe flame, and drawn out to ten or twelve times its original length, so as to form a rod like a straw in size. A sheaf is made up of thirty short pieces of this thin tube, each four inches in length, which are laid side by side, and bound up into a bundle by a thread. This is the compound capillary, a more perfect instrument than the single tube.

The gas may be forced through the capillary in two different ways:—1. By throwing the gas, by means of a condensing syringe, into a strong metallic box, where it is compressed to any desired extent, such as 1½ or 2 atmospheres; and afterwards, when the experiment is to be made, allowing the condensed gas to escape into the air by passing through the capillary. The time is noted which a certain number of cubic inches of the gas take to escape. Or, 2. With gas under the atmospheric pressure only, by allowing the gas admission to a good air-pump vacuum, by the channels of the capillary, and noting, as before, the time required for the passage of a constant volume. The law of temperature was quite unexpected, but very beautiful. It is, that the colder air is, or any other gas, the more quickly does a constant volume of it, such as one cubic inch, pass through the capillary under any pressure. The increased velocity is simply in proportion to the increased density which the gas acquires at the low temperature. Of air, for instance, reduced to half of its usual bulk by cold, one cubic inch passes in half time; and as one cubic inch of the cold air is of double weight, it follows that the weight of cold air which passes, in the same time and by the same force, is increased four times. The law of the passage of air of different temperatures through an aperture in a thin plate is very different. The warmer the air the more rapidly does it pass for equal volumes; or, while the velocity of transpiration by a tube is directly as the density, the velocity of effusion by an aperture is inversely as the square root of the density, a nearly opposite result.

The law of density or elasticity is equally simple. The denser air is made by compression, the more rapidly does one cubic inch of it pass through a tube into a vacuum; and here, again, the velocity increases in direct proportion to the density. Air of doubled density passes into the vacuum in half time. The transpiration of a gas is therefore always promoted by condensation, whether produced by cold or by mechanical compression. It appears as if the momentum from increased weight gave to the gas a correspondingly increased power to overcome resistance. I may subjoin a Table of observations on the passage of air of different densities into a vacuum, in confirmation of this law, and also to illustrate the degree of precision of which transpiration experiments are susceptible.

Transpiration of Equal Volumes of Air.

Density or Elasticity.	Time of Passage in Seconds.	
	Observed.	Calculated.
1 Atmosphere.....	1106	1106
1·25 ,, ...	883·1	884·5
1·5 ,, ...	739·5	737·3
1·75 ,, ...	628·25	632
2 ,, ...	553	553
2·25 ,, ...	489·4	491·5
2·5 ,, ...	440	442

It will be remarked, that the observed times rarely differ more than two or three seconds from the calculated times. While a certain measure of air, of one atmosphere in density, passes in 1106 seconds, an equal measure of air of two atmospheres, is found to pass in 553 seconds, or in exactly half the first time. But this last measure is twice as heavy as the first, so that twice the weight is transmitted in half the time, or an equal weight in one-fourth of the time. I may add, that the effusion of air of all densities, by an aperture, takes place with equal velocities, instead of velocities corresponding directly with their densities, as in transpiration.

The most curious results in transpiration, however, are the times of passage of different gases, which are peculiar, and do not appear to depend upon the specific gravities of the respective gases.

The most general and simple of the results is, that the transpiration velocity of hydrogen gas is exactly double that of nitrogen gas. These gases, it will be remembered, have a less simple relation in density, namely, 1 to 14. The transpirability of carbonic oxide, like the specific gravity of that gas, appears also to be identical with that of nitrogen.

The result which may be placed next in point of accuracy and importance is, that the transpiration velocity of oxygen is related to that of nitrogen in the inverse ratio of the densities of these gases, that is as 14 to 16. In equal times it is not equal volumes but equal weights of these two gases that are transpired; the more heavy gas being more slowly transpired in proportion to its greater density. Mixtures of oxygen and nitrogen have the mean velocity of these two gases, and hence the time of air is also found to be proportional to its density when compared with the time of oxygen.

The relation between nitrogen and oxygen is equally precise as that between nitrogen and hydrogen. The densities, calculated from the atomic weights of oxygen and nitrogen, namely, 16 and 14, being 1 for oxygen, 0·9010 for air, and 0·8750 for nitrogen; the observed times of transpiration of equal volumes of the same gases are for oxygen 1, air 0·8970 to 0·9010, and for nitrogen 0·8708.

The result for carbonic acid, which is, perhaps, next in interest, appears at first anomalous. It is, that the transpiration time of this gas is inversely proportional to its density, when compared with oxygen, or 0·7272, the time of oxygen being 1. Their velocities will, of course, be directly as their densities. It is to be remembered, however, that carbonic acid is a compound gas, containing an equal volume of oxygen. The second constituent, carbon, which increases the weight of the gas, appears to give additional velocity to the oxygen, in the same manner and to the same extent as increased density from pressure or from cold increases the transpiration velocity of pure oxygen itself. A result of this kind shows at once the important chemical bearing of gaseous transpirability, and claims for it a place with the doctrines of gaseous densities and combining volumes.

The circumstance, that the transpiration time of hydrogen is one-half of that of nitrogen, indicates that the relations of transpirability are even more simple in their expression than the relations of density among gases. In support of the same assertion may be adduced the additional fact, that binoxide of nitrogen, although differing in density, has the same transpiration time as nitrogen. Protoxide of nitrogen and carbonic acid have one transpiration time, so have nitrogen and carbonic oxide, as each pair has a common density.

The transpiration of twenty other gases and vapours was experimentally determined, and found to be uniform like the preceding gases, with tube resistances varying in amount from 1 to 1,000. This list includes the following substances:—The time of transpiration of an equal volume of each is subjoined, the time of oxygen being 1, and that of air 0·9. The shorter the time, the greater of course the velocity. Proto-carburetted hydrogen 0·5510, olefiant gas 0·5093, ammonia 0·5115, cyanogen 0·5060, hydrocyanic acid 0·45, hydrosulphuric acid 0·62, bisulphide of carbon 0·61, sulphurous acid 0·65, sulphuric acid nearly 1, chlorine 0·67, bromine nearly 1, hydrochloric acid 0·7363, ether 0·4408, methylic ether 0·4826, chloride of ethyl 0·4988, chloride of methyl 0·5475, coal gas 0·5716, and the vapours of water and alcohol, both nearly the same

as air, and coal tar naphtha nearly the same as that of coal gas.

The principal results respecting the transpiration of these vapours may be summed up as follows:—

The velocity of protocarburetted hydrogen is 0·8, that of hydrogen being 1.

The velocity of chlorine appears to be 1¼ times that of oxygen; of bromine vapour and sulphuric acid the same as that of oxygen.

Ether vapour appears to have the same velocity as hydrogen gas; their densities are as 37 to 1.

Olefiant gas, ammonia, and cyanogen to have equal or nearly equal velocities, which approach closely to double the velocity of oxygen.

Hydrosulphuric acid gas and bisulphide of carbon vapour appear to have equal or nearly equal velocities.

The compounds of methyl appear to have a less velocity than the corresponding compounds of ethyl, but to be connected by a certain constant relation.

It was no part of my plan to investigate the passage of gases through tubes of great diameter, and to solve pneumatic problems of actual occurrence, such as those offered in the distribution of coal-gas by pipes. But I may state, that the results must be similar with truly elastic gases such as air and carburreted hydrogen, whether the tubes are capillary or several inches in diameter, provided the length of the tube is not less than 4000 times its diameter, as in the long glass capillaries of my experiments; some of which tubes were 1-40th of an inch in diameter. The small propulsive pressure applied to coal-gas is also favourable to transpiration, as well as the great length of the mains; and I would therefore expect the distribution of coal-gas in cities to exemplify approximately the laws of gaseous transpiration. The velocity of coal-gas should be 1·575, that of air being 1 under the same pressure. And with a constant propulsive pressure in the gasometer, the flow of gas should increase in volume with a rise of the barometer or with a fall in temperature, directly in proportion to the increase of its density from either of these causes.

HOSPITAL REPORTS.

ST. BARTHOLOMEW'S HOSPITAL.

There were several operations performed at this Hospital on Saturday.

EPITHELIAL CANCER OF THE LOWER LIP.

A patient of the name of John Edmund, aged 55, was operated on by Mr. Lloyd, for epithelial cancer of the lower lip. The disease presented the ordinary character, and extended an inch or more across the centre of the lower lip. It had existed about three months. There were no enlarged glands to be discovered under the jaw, or in any part of the neck. The morbid part was removed by a horizontal section. The operation only occupied a few seconds. The patient is going on most favourably.

After the operation, Mr. Lloyd made some practical remarks. He stated, that in this disease, when the parts are freely removed by the knife at an early period, there is seldom any recurrence of the complaint. He observed, that four patients in particular, on whom he had operated under such circumstances, had been long under his observation, without any symptom whatever of the disease recurring. One of the patients lately died, who had been operated on nine years before. He was free from anything like carcinomatous affection in every part of his body at the time of his decease. Another of the patients, nearly seventy years of age, operated on between thirteen and fourteen years ago, is quite healthy, and free from every appearance of the disease. Adverting to the cause of the disease, Mr. Lloyd doubted whether the habit of "smoking" was adequate for its production. Tobacco, as well as the common pipe, might become an irritant to the lip; they might each produce an action of its own; but is it likely that a specific disease would be the result? Must there not always be some cause previously existing, "a predisposing state," as it is called, of the parts, or, in other words, the disease already present in an embryotic or latent condition? Smoking is a habit so much indulged in by the great bulk of the labouring poor from a very early age, and comparatively so very few are affected with the disease in question, that Mr. Lloyd was of opinion, that those gentlemen present who have a taste for it may indulge in the use of their cigar without any fear of epithelial cancer.

AMPUTATION AT THE UPPER PART OF LOWER THIRD OF THE THIGH.

Leonard Minchin, aged 22, was admitted into the Hospital on the 29th of August last, under Mr. Lloyd's care, on account of disease of his left knee, originating from an accident whilst playing at cricket nearly three years ago. Suffered great pain at the time, but some gin being given him, he was able to finish the game. From that time he has suffered more or less; but, during the last eight or ten months, and particularly lately, his sufferings have been very great. The slightest motion of the limb occasioned the greatest pain. His rest at night was much broken by pain; his pulse was constantly quicker than natural; he had of late lost flesh and strength considerably, and he altogether felt his limb such a burden to him, that he was anxious for its removal. A consultation was held on the case, and an unanimous opinion given that the limb should be amputated. Mr. Lloyd, therefore, on Saturday removed the limb, having recourse to the double flap operation. To restrain the hæmorrhage it was necessary to apply ten ligatures. The flaps were brought together by one suture. Wet lint was applied to the face of the stump, and a calico bandage was applied all over, so as to make gentle pressure, and give support to the divided muscles. The stump to be kept cool by the frequent application of cold water.

There has been no secondary hæmorrhage, and the case is going on favourably.

REMOVAL OF ADIPOSE TUMOUR.

The next patient brought into the theatre was a patient of Mr. Lawrence. The disease was a small fatty tumour at the bend of the right arm. It had existed more than twenty years. It was very loosely connected with the adjoining tissues, and was expeditiously removed by Mr. Lawrence.

RADICAL CURE OF HYDROCELE BY NOVEL METHODS.

A patient, Benjamin Green, aged 38, admitted into the hospital with hydrocele of the tunica vaginalis, was operated on for the "radical cure" by Mr. Lloyd also on Saturday last. He pointed out to the students that the tumour projected more than common at its upper part, was contracted at its middle, and larger below, exhibiting somewhat the hour-glass shape. He stated that he had seen many large hydroceles of a similar figure. That the fluid in the two portions communicated was evident to the touch. But as a twelvemonth before Mr. Lloyd had operated on the opposite side of this patient for strangulated inguinal hernia complicated with hydrocele, it was important to examine the present hydrocele with care. Mr. Stanley having examined the case, and concurred in the opinion that had been formed of the nature of the disease, Mr. Lloyd at once punctured the sac just below the contracted part and drew off about thirty ounces of greenish-yellow fluid. He then injected the sac with undiluted port wine, using a pint for the purpose. It was allowed to remain in the sac for about fourteen minutes, and occasioned very little pain. Whilst waiting for the abstraction of the wine, Mr. Lloyd made some remarks on some other modes of treating hydrocele.

He first adverted to the treatment by forcibly injecting the sac of the tunica vaginalis with air. He employed this plan some years ago in several cases among the out-patients of the hospital; at first he thought with success, but, with the exception of one case, the disease recurred in all; and what was the permanent result in that one, he had had no opportunity of ascertaining. He had also given acapuncturation a fair trial, but found it a very uncertain remedy. It is, however, oftener successful in children than in aduits. But the plan of treatment most relied on by Mr. Lloyd, is one which he has adopted almost exclusively at the hospital for several years. It consists of the introduction into the sac, after it has been emptied of its contents, through the canula, of a small portion of hydrarg. nitrico-oxydi, finely levigated. This plan has been employed in a large number of cases, and hitherto without a failure, as well as without any untoward consequence whatever. It excites the necessary degree of inflammation, with as great, if not greater certainty than the injection of wine, solutions of sulphate of zinc, iodine, &c. It is, moreover, a much more convenient mode of treatment, as well as saving much time. The mercury is introduced, the patient is left to himself, and the surgeon is at once at liberty.

Mr. Lloyd has likewise lately cured a case of hydrocele, in a hospital patient, by pressure—tightly strapping up the testicle directly after evacuating the fluid. The pressure was kept up for three days, by which time hernia humoralis was established; since which the patient has gone on precisely in the same course as is the case after vinous injection.

LONDON HOSPITAL.

On Thursday, the 13th of December, Mr. Curling performed the operation for strabismus, on an unmarried man, aged 40, who had been an in-patient under Mr. C. since October 22nd. The operation has succeeded, although at the time the eye did not return exactly to its natural position, notwithstanding that every portion of the muscle was perfectly divided.

This patient, who is of a somewhat robust, but intemperate appearance, was admitted for an inflamed finger and hand, which had followed a wound from a knife, a week prior to his application, whilst he was affected with syphilis; the poison of which had inoculated the wound. His hand was considerably swollen and inflamed, the inflammation extending up the arm in the course of the absorbents; the forefinger fluctuated indistinctly, while at its apex is a small sore indicating the seat of the original accident. The part was freely opened, and the hand enveloped in a poultice.

The man, on his admission, was in a state of great tremor and agitation; his articulation was impaired; tongue furred, tremulous, and indented at its margin; pulse full, but very soft; the man has had no sleep for several days, and is evidently labouring under an incipient attack of delirium tremens. For the last nine years he has led an extremely irregular and intemperate life, seldom being free from the influence of drink; he has had delirium tremens, three years since, whilst at St. Helena, and a slight attack of the "horrors" at least a dozen times.

About a month prior to his admission, he contracted two small chancres, which still exist, one on, and the other at the root of the penis; these have much increased the last few days, and now presen a very unhealthy aspect.

He was sent to bed and ordered ℞ Opii ♏ xl. and allowed beef tea, gin ʒiv, porter Oij. Towards night the patient became more excitsd, so that two more doses of ℞ Opii were given.

Oct. 23rd. Has passed a very restless night, and had no sleep, His excitement is in no way abated, and it is with difficulty he can be kept in bed; ordered, ℞ Opii, ʒss stat.: this was repeated in the evening, and ʒi administered at night, with ♏xxx. every hour if requisite.

24th. Several doses of the mixture have been given, but have failed to procure rest; on the contrary, his symptoms have much increased, fancying innumerable objects about his bed, &c. His pulses are quickened, but have less power, and the strength of the patient is evidently beginning to fail. Ordered liq. opii vid. ʒss, ammon. carb. gr. v.; mist. camph., 4tis horis, and an extra pint of porter at night.

25th. Passed a better night, has been less excited, and had about an hour's sleep. This morning he is calmer, and seems much better. Rep. mis. ter. die. The inflammation of the hand has subsided, and the wound discharges freely. A solution of nitr. silver gr. v., and ʒij to be applied to the sores on the penis. As night approached the man became a little more restless, so that the mixture was ordered every two hours, and Oi. porter extra.

26th. Much improved, but is very weak; has slept for several hours. He now begins to crave for

food. Ordered, full diet and wine Oij. From this time he began steadily to improve, the wine was discontinued, and its place supplied by porter Oiv. and quinine and mineral acids were ordered. On November 4th the man complained of a swelling about the anus, which, on examination, was found to be an abcess. Leeches were applied and then a poultice; these were repeated until distinct fluctuation was detected, when it was lanced, the patient's bowels been kept gently open.

During this period, the sores on the finger and penis were rapidly healing, under the application of the solution of nitr. silver.

Towards the end of November, a pustular eruption, chiefly on the face, showed itself, which yielded to the decoct. cinch. c. pot. iodide, and pil. hydrochlor. co. gr. v. omni nocte. By the 13th of December, all traces of the original affection were removed, and the man's health so far re-established as that Mr. Curling considered him in a fit state to undergo the operation for strabismus, which was accordingly done.

The foregoing case affords a good example of the violent and extensive inflammation which often follows a slight wound, occurring to a person of intemperate habits, complicated here, no doubt, by the presence of a poison.

For three days, prior to his admission, the man having exhausted his means, was unable to obtain his usual amount of stimulus,—thus explaining the cause of the delirium tremens, with which he was evidently affected, and which yielded under the exhibition of a large amount of fermented and spirituous liquors, combined with sedatives and nourishment.

It is curious, in this case, that the tincture of opium failed to produce its desired effect, but seemed rather to aggravate the symptoms; the liq. opii sedativus, however, succeeded perfectly.

It will be seen, that, in the treatment of the primary sores, no mercury was administered. Mr. Curling remarked, that, in this case, the mineral was contra-indicated, from the disordered state of health under which this patient laboured, as manifested by the consequences of so slight a wound, by the delirium tremens, and by the subsequent formation of the abscess about the anus.

For the relief of the pustular eruption which succeeded the healing of the sores, only the mildest remedies were employed, viz., Plummer's pill, in alterative doses, and iodide of potassium in decoct. chonæ

It will be interesting here to allude to a case which has lately occurred amongst the out-patients, under Mr. Ward, showing the care necessary even in the application of nitrate of silver, when the system is out of order. A young female, who had had violent inflammation of the theca of the thumb, succeeding the prick of a pin, applied, when it had proceeded so far, that the phalanx had become necrosed.

Amputation at the first phalanx was performed, and the flaps, in a short time, had united, except at the outer angle, where there were some prominent granulations, over which nitrate of silver was rubbed, it not having been noticed, at the time, that the patient was suffering from considerable constitutional disturbance, brought about from disorder of the digestive system, (as was found to have been the case on her next application.)

The consequence of this was, that very violent inflammation supervened, resulting in separation of the line of union of the flaps, which became very purple, appearing, in fact, all but in a state of gangrene.

After the exhibition of a calomel and rhubarb purge, and a little alterative tonic medicine, the nitrate of silver was again freely applied, without the slightest injurious effect, and the case did perfectly well.

NORTH STAFFORD INFIRMARY.

George Nicklin, aged 20, admitted under Mr. Ball, March 11, 1849. Since two years of age he has had pain, more or less severe, after voiding his urine, which has frequently been so severe as to oblige him to lay up for several weeks together. He has, however, followed a light employment as a labouring man, at irregular intervals. Since July, 1844, the pain and difficulty in voiding his urine has increased, and he has not been able to do any work. When a boy he had been sounded at different times, but no stone was ever detected until Mr. Ball discovered one on the 8th of March.

He is not a very healthy-looking subject, having a bloated and scrofulous appearance, but has always, with the exception of the urinary affection, enjoyed good health. Tongue rather furred; pulse 90; urine neutral, coagulable by heat and nitric acid.

22nd.—℞ Ol. ricini. ft. haust. st. sum.; enema calidæ aquæ. Tongue still rather white; bowels opened twice or three times during the day.

This day Mr. Ball performed the lateral operation for lithotomy. The bladder being empty, some little difficulty was experienced in seizing the stone. After it was removed, an elastic tube was introduced through the wound into the bladder, and secured by tapes. The calculus was oval, the surface in some parts uneven, particularly at one end, which was of a lighter colour than the rest of the stone. It weighed 8 drachms.

10 p. m.—He expresses himself easier than before the operation.

℞ Calomel, gr. iij.; Opii, gr. j. h. s. s.

23.—Has passed a quiet night; skin moist, a little pain at the lower part of the abdomen, and smarting of the wound. Bowels opened; pulse 92.

24.—Going on favourably. Some of his water passes through the penis.

25.—No bad symptoms. Tongue rather loaded with a whitish fur. A weak solution of acetic acid applied about the perinæum.

26—Most of the water passes through the penis when he is lying on his right side. He takes one-third grain of morphia every night.

31.—Still improving. Complains of the wound smarting. Urine neutral.

℞ Acid. nitr. muriat., ♏vj.; aquæ puræ, ℥j.; ft. haust. ter. die sum.

April 2.—Continues to improve.

4.—Has a good deal of pain in the penis when passing his water, which is alkaline, and contains thick ropy mucus. ℞ Mist. copaiba.

8.—Wound healing; water less thick; much less pain in the penis; caustic to the granulations.

14.—Much better; wound nearly healed.

May 20.—Discharged cured.

Dec. 21, 1849.

PROGRESS OF MEDICAL SCIENCE.

FRANCE.

(Paris Correspondence.)

METALLIC SPONGES.

Of the various sciences connected with Medicine, Chemistry has always occupied the first rank in France, and been cultivated with the greatest success. Hence the most important Papers presented to the Institute are generally more or less devoted to subjects of a chemical nature. A young pupil of the Mining School has bestowed an immensity of time and labour on the production of metallic sponges, some curious examples of which he showed at the late exhibition. The experiments of M. Chenot on these sponges, led him to direct his attention to the subject of animal heat, and to propose a new classification of animals, having for its basis the absolute heat of each, which is proportionate to the quantity of oxygen consumed.

"Hitherto," says M. Chenot, "animals have been classed into warm and cold blooded. It is admitted that man consumes about six pounds of oxygen in the twenty-four hours, and that his heat is fixed. It has also been admitted that fishes consume only 1-6000 part of the quantity consumed by man, and that their heat is variable. They are called cold-blooded. As for amphibious animals, they have not been classed in any precise manner."

Now, it is certain that all animals consume oxygen, and that in proportion to their weight; and M. Chenot concludes, that the variations of animal heat depend on the peculiar medium in which the several animals live. The following are the reasons on which he grounds his theory. The air is a bad conductor of heat, and hence the caloric of the human body does not vary much. But as water conducts heat much more rapidly, fishes are compelled to bring their temperature into an equilibrium with the surrounding fluid. As for amphibious animals, air and water give them a temperature which varies according to the conductibility of the media they may happen to be in.

Man takes his oxygen from a mixture of gases which he decomposes, setting free the nitrogen. Fishes take their oxygen from a liquid gas, which they also decompose, setting free the hydrogen. Amphibious animals, having double organs, possess mixed properties. Man perishes in the liquid gas, *water*; a carp perishes in a gaseous mixture; an amphibious animal lives in both, and its temperature is a mean between the two classes. Hence the Author thinks it demonstrated, that the medium in which the animal lives alone determines the temperature of assimilation, which is absolute for all, and proportionate to the quantity of oxygen absorbed, and this again sensibly proportionate to the mass of the animal. From metallic sponges to animal heat the distance, one would have thought, was great; but M. Chenot shows the connexity by remarking, that sponge-iron is an amphibious combustible; the heat of combustion being absolute, proportionate to the quantity of gas absorbed, and the latter again absorbed in proportion to the quantity of the metal.

Apropos of the same subject may be noticed an interesting memoir, by M. Leon Dufour, on the aquatic respiration of insects. In this numerous class of animated beings, respiration takes place, either in the air or in the water, according as the animal may be a larva, nymphe, or perfect insect. Whatever the mode of respiration may be, the air circulates in canals, which subdivide into an infinite number of smaller tubes, that transmit it to all the viscera, and even to the minutest tissues of the animal's body, where it appears to serve for nutrition. The air may be inhaled either through external respiratory orifices or by special organs, and the insect is thus enabled to live in air or water, being perfectly amphibious. After having given a minute anatomical description of the respiratory organs of these insects, M. Dufour enters into some curious details relative to one of them, the *Phytobius hydrophilus*. This insect lives on the branches of a submerged aquatic plant, the *Myriophyllum spiratum*: but although the author observed it with the utmost attention, he never could detect it coming up to the surface of the water to breathe the air. From time to time, however, it shot off from the plant and executed the most rapid movements in the fluid, intended, apparently, to disengage the air fixed in the water, and thus render it more easily respirable.

SILVER IN SALT WATER.

MM. Malagatti and Durocher had already pointed out the existence of silver in many minerals, with which it had not been previously supposed to have any relation. In a second and recent memoir to the Academy of Sciences, the same gentlemen announce, that they have detected silver in sea-water, and even in many organic bodies. The Anthors were led to the research on this precious metal in salt water, by the fact, that the long action of the saline fluid on the minerals called pyrites, &c., which contain some silver, will convert the sulphuret into a chloride; and that the formations on which the sea now reposes, or has reposed generally, contain some of the sulphurets just mentioned. This idea, at first purely theoretical, proved on experiment, to represent a fact. Our Authors state, that the waters of the sea, taken at several leagues distance from the coast of St. Malo, contained a certain quantity of the precious metal. The ashes likewise of several salt-water plants, as the *fucus serratus*, and *of ceramoides*, contain more than 1-100,000 part of silver. It was also found in common sea-salt, muriatic acid and artificial soda, and even in bullock's blood. Some persons, of warm imagination, hope that this discovery may be turned to practical account, but the dose appears too homœopathic to present much importance.

In recounting, however, the labours of foreign discoverers, I must not forget our own countryman, the universal Brougham, who has been making some experiments, it is said, at his chateau,

in the south, and discovered an electrical light of surpassing intensity. He exhibited it some nights back from the summit of the castle, and charmed the whole population, who mistook the phenomenon for a dislocation of the moon. Disappointed in his project of becoming a member of the National Assembly, His Lordship probably has an eye to the Institut, and is preparing his "titles."

We have, also, had Mr. Yearsley here for the last few days on the more modest mission of instructing the faculty—and all whom it may concern—on the benefits of his "artificial tympanum." He has had reason, I understand, to be well pleased with his reception amongst the French *savans* who are ordinarily sceptical on propositions for making "the blind to see, or the deaf to hear."

THE CHOLERA OF 1832 AND 1849.

The following comparative statistics of epidemic cholera, as it prevailed in Paris during the year 1832 and 1849 may be useful.

Arrondissement.	1832. Deaths.	1832. Population.	1849. Deaths.	1849. Population
1st	600	66,497	836	108,019
2nd	535	75,087	915	117,388
3rd	403	49,071	500	63,710
4th	528	45,151	449	48,233
5th	519	66,574	1,023	96,628
6th	817	81,037	1,120	103,795
7th	1,021	58,944	837	72,893
8th	1,306	72,729	1,143	109,925
9th	1,239	41,895	717	51,308
10th	1,685	81,480	1,137	98,635
11th	1,041	50,508	514	68,652
12th	1,191	70,189	1,759	98,100
	11,168	759,185	10,950	1,034,286
Deaths in Hospitals	7,234		8,041	
Total deaths	18,402		18,991	

The above columns at once show, that the epidemic of 1849 has been more severe in Paris than that of 1832. There were 589 more than in '32, but this is accounted for by an increase of population amounting to 300,000 souls. If we estimate both from the number of deaths in proportion to the population, we have 23 1-3rd per 1,000 for 1832, and 18 1-3rd per 1,000 for 1849.

But, to obtain still greater accuracy we should add to the population of 1849 the garrison of Paris, which was more than double that for 1832. This will give us a mortality of 17 per 1,000. In the provinces the mortality was 13 per 1,000.

It is remarkable, that the epidemic commenced at the same period of the year during both epochs, and continued very nearly the same time, though with different intensities. Thus we find—

	1832.		1849.
March	40	..	130
April	7·602	..	694
May	440	..	2·426
June	546	..	5·769
July	1·820	..	419
August	643	..	810
September	107	..	670
October	..	..	32

The epidemic, then, of the present year, was slower in its progress. In 1832 the cholera attained its maximum on the second month after its appearance, carrying off more than 7500 individuals in four weeks. During the present epidemic, the disease took four months to attain its maximum of intensity; it disappeared a month sooner than the former visitation, and we had no recrudescence worthy of notice.

THE ALBUMINIMETER.

The pathologist often desires to measure the quantity of albumen contained in a fluid, but the problem is not always of easy solution. M. Biot was the first who pointed out that the albumen of the blood and of the white of egg deviates polarized light to the left; but he has not given the numerical value of the deviation. M. Bouchardet, from three or four experiments, set it down at 27° 42; but the insufficiency of the common apparatus, and the opacity of serum, prevented him from rendering the application general.

M. Becquerel, jun., has invented an instrument somewhat similar to that proposed by Mistcherlitch for sugar, but differing from it in rendering the intensity of the luminous image greater. He calls this apparatus an "albuminimeter," and by its use has found that the deviation of the polarized ray to the left is an exact measure of the quantity of albumen contained in any organic fluid. Its rotatory power, as ascertained by M. Becquerel, is 27° 36, which differs very slightly from the value assigned by M. Bouchardet.

SCOTLAND.

[Edinburgh Correspondence.]

CASE OF HERNIA STRANGULATED WITHIN THE ABDOMEN.

Mr. Syme has now published "the case of hernia strangulated within the abdomen, and remedied by operation," of which a brief notice appeared in the *Medical Times* of first December, taken from his oral account of it at the first meeting of our Medico-Chirurgical Society. It may be worth while to explain one or two points in regard to which the first account was rather meagre. It appears, that the patient had been affected with inguinal hernia of the right side for eleven years, and had worn a truss till six weeks before the operation, when it was left off as the tumour had not descended for the previous five months, neither had the patient observed any return of the swelling up to the time when the symptoms of strangulation set in. As was stated in the first account, Mr. Sidey, on careful examination, thirteen hours before the operation, could feel a tumour in the right iliac region the size of a hen's egg; but just before the operation, Mr. Syme, owing, as he thought, to the abdomen having become distended, could detect no tumour, bnt only a slight degree of induration or resistance opposite the internal ring, over a space not much larger than the point of a finger. Mr. Syme, as before stated, was led, notwithstanding, to undertake the operation, owing to his confidence in the accuracy of Mr. Sidey's observation. After the aponeurosis of the external oblique was divided up to the internal opening for the cord, there was still no appearance of a tumour, but only a more distinct feeling of resistance. The other coverings of the cord being divided, a dark-coloured mass came into view at the internal ring. As to the rest of the operation, the following are Mr. Syme's own words: —"Pulling this towards me, I readily drew out a hernial sac, about the size of a hen's egg, which, being opened, was found to contain a portion of the small intestine. Searching for the stricture, I encountered a difficulty from the sac yielding to the slightest pressure, and returning with its contents into the abdomen. I therefore seized it with a pair of forceps, and thus obtained the requisite tension, until I succeeded in passing the edge of my nail beyond the stricture, and guiding the bistoury upon it, effected the dilatation necessary for accomplishing reduction of the strangulated part." The patient is now quite well. Mr. Syme adds, that the stricture was evidently caused by the neck of the sac, and inclines to think, though doubtingly, that the contents of the sac had not been previously in a state of incarceration, but had entered the sac just before the symptoms of strangulation began. Mr. Syme refers to a tabular view of the recorded cases of herniæ reduced into the abdomen in mass, while still in a state of strangulation, which is given in Mr. Teale's work on "Hernia." From this Table, it appears, that an operation, under such circumstances, has been successful within the United Kingdom in only two instances, namely, in one case treated by Mr. Luke, and another by Mr. Wade. Mr. Syme had examined the parts concerned after death in two cases, to which he had been called, when the patients were sinking under the effects of this "reduction in mass." He found the structure, in both cases, in the neck of the sac, and such as might easily have been removed by operation. This previous knowledge appears to have had its weight in determining him to perform the operation just described. This case of Mr. Syme's is not, however, to be regarded as of the same character as those enumerated in Mr. Teale's Table; for, in it, the hernia appears not to have descended during more than six months, so that the strangulation took place entirely within the abdomen, and accordingly Mr. Syme concludes his paper with the remark, "that the case may be regarded as possessing some interest, from being, so far as I know, the only instance of recovery from a hernia which has become strangulated within the abdomen."

A singular case of intra-abdominal hernia was reported in the *Annales de la Chirurgie Français*, March, 1843, by Carteron and Laussier, the result of which was fatal. Had there been no dissection, it might have been set down as a fatal case of "reduction in mass;" and it agrees with Mr. Syme's chiefly in this, that the strangulation must have taken place within the abdomen after reduction. The patient was a female, aged forty, who had borne many children. She had been subject to femoral hernia of the right side for twelve years, which was habitually kept up by a truss. In straining at stool the hernia descended, and was immediately returned. She soon after felt an uneasy sensation of dragging in the right groin, of no severity at first, but increasing rapidly to a great pitch of intensity, and extending to the umbilical region. The pulse was slow, small, and compressed; the surface cold; the expression of great distress. The abdomen was soft; no tumour could be perceived in any part of it. The hernia was up, and could not be brought down by any effort of coughing. Vomiting soon arose. No remedies afforded any relief. Next morning, the abdomen was distended and tympanitic. Finally, pains like those of parturition occurred, and she died on the morning of the third day. The *post-mortem* examination discovered a noose of small intestine engaged in a recent rent of a hernial sac. The bowel was entire. The seat of the stricture in this case was probably beyond reach of the knife, even if it could have been pulled upon, as in Mr. Syme's case; the hernial sac being double, and its principal portion derived from the broad ligament of the uterus.

ECTROTIC TREATMENT OF VARIOLA.

Dr. Bennett, in a clinical lecture on the Ectrotic treatment of Variola, states several cases to illustrate the utility of mercurial ointment thickened with starch, as an application to the face in that disease, as recommended by Briquet and other French authorities. The formula used, is an ounce of mercurial ointment with two drachms of powdered starch—this ointment to be smeared over the face night and morning. One of the cases in which he employed this application, was particularly severe. The mercurial plaster separated from the face about twenty days from the commencement of the eruption, leaving the subjacent skin smooth, notwithstanding that there were deep pits on the arms and shoulders, at the roots of the hair, and around the mouth where the patient had picked off the plaster. There is little reason to doubt that applications of this kind do prevent pitting, or, at least, diminish the tendency to the formation of pits. A long-known plan in Edinburgh is the use of an oiled-silk mask, and this we think often proves beneficial. The Vigo plaster of the French Codex, to which Dr. Bennett refers, was employed in the last century; it is composed of simple plaster and mercury, rubbed up with a farrago of gum-resins, &c. This application is still a favourite with many French authorities. The proportion of metallic mercury to the other ingredients in the Vigo plaster is as 1 to 8. It has often been asserted that the presence of mercury is not essential to the effect of such applications; but various experiments made by French authorities, particularly by Serres and Briquet, prove that unctuous applications and simple plasters are far from being as effectual as those that contain mercury. The experiments of Serres consisted in applying to the one arm in variola a Vigo plaster (emplastrum hydrargyri compositum of the French Codex), and to the other a common diachylon plaster in the earliest possible state of the disease, and the effect uniformly was, that the pustules completely aborted under the Vigo plaster, while under the diachylon plaster they proceeded through three successive stages.

It may be laid down as a rule that in proportion to the degree in which the pustule undergoes a complete suppuration down to its base, is the tendency to the formation of a pit, and in the confluent state the same rule applies; thus, the pustule, which is at

first conical, then semi-spherical, and afterwards depressed at the apex, forms a corresponding depression at its base as often as the suppuration takes place completely throughout. And when there is confluence, the depressions and ridges corresponding to the aggregate of the pustules together give the seamed and cicatrized appearances, so disfiguring to the face after severe confluent small-pox.

In all the milder forms of small-pox, as the discrete and the modified, the suppuration is less complete, or does not extend down to the base and pits; therefore, do not follow. Whatever means, then, can check the progress of the suppuration when it threatens to become complete, or, in other words, makes the pustule abort, will prevent pits. The term, Ectrotic, was introduced, we believe, by Serres, when he first proposed to make the small-pox pustules abort, by means of Nitrate of Silver applied to each. The term being taken from *Εκτιτρωσκω*, abortum facio. And mercurials applications appearing to produce abortion also, this kind of treatment is not improperly termed Ectrotic. The whole subject seems to have been too little attended to in this country.

IRELAND.

[Dublin Correspondence.]

THE DUBLIN SANITARY ASSOCIATION

Held a meeting on Wednesday, the 28th ult., to receive the Report of a deputation, appointed to wait on Sir William Somerville, relative to a Bill, now *in transitu*, on sanitary matters, and all important to the inhabitants of Dublin. Some objections on the score of taxation were urged; others as to the Board of Health meddling in the matter. The Deputation was very politely received by Sir W. Somerville. A very long discussion ensued, but as yet little practical advance seems to have been made. The Secretary would be happy to record suggestions from those who had applied themselves to the question of sanitary reform; but otherwise things look very like the way they were before.

THE BELFAST COLLEGE.

This branch of the "Queen's University in Ireland" was opened on the 20th ult., with all the form and manner befitting so auspicious an event. Among those present, we recognized the old familiar faces of Dr. Corrigan, Professor Harrison, Dr. M'Donnell, Dr. Neligan, Dr. Duncan, Dr. Cuming, (Armagh), Sir James Murray, Dr. Cooke and some others, anxious, of course, to stand sponsors for the new undertaking. The Address of the President, Dr. Henry, listened to with much attention, was, perhaps, of more than average merit. The Colleges, the Lecturer reminded his hearers, were due to the liberal feelings of Sir James Graham and Sir Robert Peel towards Ireland, the Act having been passed in July of the year 1845. The condition of Scotland and that of Ireland, with respect to collegiate instruction, were compared. In 1840 Scotland had six colleges, five universities, with a population of only two and a half millions, and not less than 3000 students. In Ireland, only every five parishes (whatever a parish may be) furnished a college student. Medicine in England was spoken of,—Lord Clarendon very properly lauded for his anxiety, for the spread of education by these institutions; great things, of course, expected by the Lecturer from their happy realization. "Action is our principle," said Dr. Henry, with more than usual emphasis, "re-action our hope." Not such, we trust, as that of a learned functionary in the west, who has tried to call the Colleges already very ugly names. In the "Belfast Institution," 176 students have already entered —more hopeful than Galway. This, however, it must be remembered, is not the College.

An outline of the course of education was entered into, and as hereafter of use to the readers of the *Medical Times*, it may possibly be worthy of preservation;—the College session has been extended to eight months from six, the old and venerable allowance of all our younger days. Six months' Lectures and dissections, and six months' idleness, the Lecturer thought "inharmonious" to mental training. "Residence" is insisted on in only two out of three sessions. The divergence, after the first year, into some one particular line of study, is as much as possible encouraged; the student, in effect, made to secure first a *general* knowledge of a number of subjects, before he gives his mind more immediately to one. The good effects of this line of study were dwelt on, and some far off epoch shadowed when the Belfast and other Colleges should supply its own lecturers from its own bosom. The first year, then, Classics, French, and Mathematics are the nuts the medical students have to crack—the value of each was of course dwelt on. In the second year, Chemistry, and the different branches of Natural History are required. In the third and subsequent years, Practice of Medicine. On the subject of Medicine, the Lecturer seemed anxious to do battle with the old way of doing things in Ireland, it being the opinion of the highest medical authorities (?) in Ireland, that a knowledge of French and Classics was wanting in the preliminary courses, not knowing that even at Apothecaries' Hall both are required.

THE GALWAY COLLEGE

Has experienced a great loss by the recent death of the President, Dr. Kirwan. Christmas, too, has come to divert the attention of the pupils.

In the department of Mental science, some observations very worthy of the attention of the Medical classes have been delivered by Professor Moffat. Commencing his "Introductory" by a general objection to the present character of our studies, as too physical—the true science of mind and life being postponed to a mere matter of showy experiment. The Lecturer entered into a laboured analysis of our present knowledge on this important subject. Galvanism and Electricity he guarded his Medical friends against, as trying to supplant that vital principle, of which the true physician should never lose sight. In France, Villemains and Cousin have been swallowed up in a cloud of mere physical philosophers; in England, it threatened the same. The objections to the study of the brain were next reviewed; the *cui bono?* &c.

The operations of the mind, the Lecturer aptly illustrated by the circulation of the blood, of which we are of course quite unaware, but which still goes on every moment. The act of standing was not dissimilar—hosts of muscles were called almost involuntarily into action, the individual quite unconscious of any effort. Even so may we conceive the mind—and the question is often asked the Practitioner—goes through acts of which it is itself often unconscious, without pain or effort; but *pro tanto* efforts, and to be looked on as such. Every one must be cognisant of the matter. Who shall interfere with the merchant or banker adding up his accounts mechanically? No mental effort, he says; yet there is mental wear and tear. In fever, in *delirium tremens*, what hosts of images are bodied forth without mental effort; yet we all know with what mental wear and tear also.

Sir Isaac Newton's mind, the Lecturer intimated, was constantly at work in spite of him. Those miraculous things done in sleep; composing music, poetry, &c., belonged to the same order of phenomena. Many mental processes we are as unconscious of, as the organist of the several keys he touches.

The Lecturer enlarged on the uses of logic, which he well defined as the science "of the appreciation of evidence." Amongst others, the medical man was one to whom it was of never-failing use. To draw inferences correctly, is about one of his best guides in practice; and for this purpose, he would do well not to neglect some of the books on the subject. The "Novum Organon" was mentioned, Des Cartes on "Method," and others more recent.

The value of "experience" was dwelt on, and Lord Mansfield's advice (*mutatis mutandis*, of use to the medical man) was cited. "Give your opinions boldly," said His Lordship,—"the chances are very many that you are right—*but give no reasons.*" —The opinion is the result of your experience, and obtained by a long mental process; but do not go over the ground again or you will fail, and confuse both your patient and yourself.

Archbishop Whately's ideas on what is called "Common Sense" in the world, as opposed to experience, were next dwelt on, very happily. "A sailor," says His Grace, "will despise the pretensions of a physician, (for sailor we would put the Commissioners of Sanitary Reform); he would prefer treating a disease by what he would call common sense; but he would laugh at the idea of navigating a ship by common sense. An architect or musician will not trust to common sense—or what becomes of archivolts and the laws of harmony. The great secret is, that common sense is only trusted when we have nothing else, and art and experience most sought after by those who understand their value. Common sense is of use in the *application* of art, but should never supersede it.

The science of the mind—the lecturer hoped to be able to show in his course, was not that tangled web it was made out, but a true science; nay, as Aristotle said, the basis of all the sciences. The abuse of the word philosophy—a term which the ancients limited to this very science was next passed in review—a glance given at the Schools of Greece —at those of Rome, which the Lecturer rather happily stigmatised as of exotic growth, and undergoing the fate of such. "Cicero," said the Lecturer, "was the last of this school—the last of a race of great men, whom St. Paul said: 'Having not a law, were a law unto themselves.'" The epoch of Christianity was next dwelt on,—the Middle Ages and their learning rather spiritedly defended,—Ireland congratulated on transmitting the lamp of science through the hands of Erigena,—Bacon dwelt on *con amore*—his philosophy happily assimilated to the Tent the Fairy Paribanon gave Ahmed—folded up it became a toy to please the hand—spread out it gave shelter to armies! The German school was shown to be very dangerous—idealistic from Bâle to Konigsberg — France, eclectic — Scotland, coming back to the days of Reid—and Cambridge, of late lifting up its head, and showing that England was not behind in the race.

TO SUBSCRIBERS.

New Subscribers will oblige by forwarding their Names direct to the Office, 147, Strand, or to the News Agents or Booksellers. All Post-office Orders should be made payable to the Publishers, Wm. S. Orr and Co.

According to our usual custom, we shall complete the Index to the Volume in our next Number.

THE MEDICAL TIMES.

SATURDAY, JANUARY 5, 1850.

The commencement of a New Volume induces the Editor of the *Medical Times* to address briefly his readers on the endeavours which will be made during the ensuing year to raise the scientific character of the Journal, to extend its practical utility, and to render it worthy of the Profession.

The scientific character of a Medical Journal can be raised only by attracting to its columns the contributions of eminent persons, whose labours are enriching and advancing medical knowledge, and by drafting into its pages the useful and important additions that appear in contemporary publications. In this way a well conducted Journal becomes not only in itself a constant source of advancement and improvement, but is, as it were, a mirror in which the improvements elsewhere recorded are accurately reflected.

The contributions that have appeared in the *Medical Times* since the commencement of the last Volume, abundantly testify to the rank which the Journal has now taken as a medium for original scientific communications. The

names of many of the most eminent of the Profession will be found among those who have enriched its pages; and the Editor has much pleasure in stating, that the promises of continued support he has received from these, and from numerous other gentlemen, enable him to assert that the present volume of the *Medical Times* will be more copiously supplied with original papers than any former volume has yet been.

Extreme pains will also be taken to introduce into the present Volume short abstracts of all important Papers which appear in any English, American, or Foreign Journals. In this way it is intended that the *Medical Times* shall accomplish, on a large scale, what the half-yearly Retrospects attempt on a smaller. These abstracts will be made by individuals whose accuracy can be relied on, and it is confidently hoped that they may be considered as giving so perfect an account of each original document, that reference may be made to them with as much security as to the original document itself.

In that department of the Journal which emanates more directly from the Editor,—viz., the Leading Articles,—various scientific questions have, during the last year, been taken up and discussed. In this way, hardly any subject has been started in medical circles, which has not been thus explained and reviewed. The foundations of Medicine, the aspect of Medical Science, the influence of Physiology and the cognate Sciences upon our Art, Sanitary Reform, the effects of Civilization on Disease, &c., have been debated, with those more strictly technical subjects which are constantly arising.

In addition to this, great pains have been taken to determine what is the real interest of the Profession in those complicated topics of Medical Reform, State Medicine, Poor-law Medical Relief, &c. The Editor has not hesitated to express his opinions frankly on these points, and he believes that these opinions have met with general approbation.

During the current year, these topics will be more widely and boldly discussed. The experience of the last twelve months has satisfied the Editor as to many points connected with the best interests of the Profession. The subject of Medical Reform will be entered into in all its bearings; the claims of Medicine on the State will be vigorously enforced; Mesmerism, Homœopathy, Hydropathy, and the like will be unsparingly tested, and every question which can affect the Profession in any way will receive ample consideration. On all these topics the Editor will be happy to receive suggestions from his Medical brethren, who yet must pardon him if he should happen subsequently to differ from them in opinion. One thing the Editor can promise, and that is, to speak honestly; and another thing he will attempt, namely, to base his speaking on sure foundations.

Another department of the Journal, with which great pains have been taken, is, the Foreign Correspondence. In Paris, Berlin, and Vienna, resident medical men have been engaged to transmit regularly to the Editor, an account of every occurrence which can prove useful to the English Practitioner. In this way, all practical improvements, all speculations, theories, or debates, which take place in France or Germany, are at once given in the columns of the *Medical Times*, with all the accuracy to which the inquirer upon the spot can attain. And it may be safely said, that if the name of the Berlin, Paris, or Vienna,—and, to come nearer home, Edinburgh or Dublin,—Correspondents could be made known, they would be found to be names of men of high rank in their Profession, whose words are entitled to the respect of every Practitioner of Medicine.

In the department of general Correspondence, the rule of the Editor has hitherto been, to give admission to letters which appear to be of interest, and which do not involve matters of a personal character. If individuals are referred to by name, the Editor deems it essential that the writer should not remain altogether anonymous; but that the Editor should at least have the opportunity of judging from the known character of the writer as to the truth and honesty of his communication.

No rule has been, or will be more strictly enforced, than that the *Medical Times* must never be made the medium of slander and scurrility. If the Editor deem it necessary to express an opinion adverse to any Individual or to any Institution, he will do it boldly and unsparingly, but in a frank and gentlemanly manner, and he is authorised to expect a similar tone on the part of his Correspondents. Nothing has been so injurious to Medical literature, as the license which certain Editors have taken, and have permitted anonymous writers to take. It may possibly be the task of the *Medical Times* to unhood some of those who damn with inuendoes the character of their professional brethren, and to pillory them as objects for the contempt and disgust of all honourable and gentlemanly men.

The Review Department has been carefully conducted during the last year, and will be still improved in the present Volume. Gentlemen of known authority on the special subject of the work will be selected for Reviewers, and the Reviews most conscientiously and carefully written.

Reports of Societies, and of all Meetings important to the Profession, will be regularly published. A special Reporter has been engaged for the London Societies; and it is hoped that the Secretaries to Provincial meetings will furnish short accounts of interesting debates, as it has not been possible at present to make any general arrangement in regard to this subject. The chief Surgical and Medical occurrences at the London Hospitals will be reported, and in this way a most valuable insight into the daily hospital practice of the Metropolis will be given to the Country Practitioner.

Finally, the Editor has the satisfaction of believing, that the *Medical Times* will soon realise the expectations of its Proprietors, and become, in every way, a worthy expositor of the progress of Medical Science. Indeed, the result can hardly be otherwise, when it is remembered that the Journal is warmly supported by a large and influential portion of the Profession; that its Proprietors are actuated only by a desire to benefit the Profession; and that its Editor is determined to carry out their principles with unflinching energy. Nor can it be denied, that to make a Medical Journal what it ought to be is a task demanding strenuous labour, careful study, and cautious determination; but the Editor does not doubt that this work, difficult as it is, may be accomplished, and the *Medical Times* may be able honourably to represent the English Medical Profession in the general literary arena of the world.

It appeared to the Editor, when, more than a year ago, the *Medical Times* passed into the hands of its present Proprietors, that the greatest services might be rendered by an independent Journal. It did not seem impossible that the causes of dissension might be removed by a careful examination of disputed questions, and by an unbiased expression of the judgments arrived at. It was known, also, that the same opinion was entertained by some of the most eminent of the Profession, wearied by continual discussions, which produced no conviction, and by everlasting suggestions, which nobody adopted. It was also felt, that there was room for a Medical Journal of scientific pretensions, and the Editor hoped to supply the want so generally expressed.

It is with great satisfaction that the Editor again recurs to the support and assistance he has received. It is with no wish to parade his success, that he states the circulation of the Journal to have rapidly and constantly increased, that offers of sympathy and aid have reached him from all classes, and that, if good wishes could assist a Journal, no periodical publication in all England would have a larger diffusion than the *Medical Times*. The Editor and his coadjutors accept this success as the natural reward of honest and earnest labour, prompted by motives of no selfish and unworthy kind. They promise their readers that the present year shall witness increased exertions, and, with the experience gained during the past year, they do not doubt that the *Medical Times* will become every way worthy of the noble and enlightened Profession of which it aspires to be the organ.

THE *TIMES* AND THE LONDON HOSPITALS.

Our excellent Contemporary, the *Times*, in its vigilant anxiety for everything that tends to the comfort of the poor and humbler classes, speaks this week of the necessity of a more steady support to the smaller but still highly useful Metropolitan Hospitals,—Institutions among which, we need hardly say, stands boldly out King's College Hospital. There is something of satisfaction in a lay brother thus addressing himself to the kindly office of encouraging our Hospitals and Schools of Medicine; a feeling which, we need hardly say, we in a very eminent manner reciprocate. Our pages for the past year bear very ample testimony to the excellence of the Institution pointed out by our Contemporary. And with the same opportunities of judging of the Institution at Charing-cross, and that in connexion with University College, we have little doubt we should find these buildings as deserving of public confidence. More than a century since, seven of our largest Hospitals were in existence, and at present we have, as remarked by Sir Robert Peel, but added three others. The

charity of our later times has evidently waxed cold, and even these three Institutions are not in that flourishing condition, in the way of funds, which every one would wish.

We have taken some trouble to exhibit the "organisation" of the Hospitals on the Continent. In Paris, they are all Government Institutions; many would like to see them so in London, but the thing is impossible. Still we are glad to see the Government bestirring itself in matters of science, as evidenced in its donation of a thousand pounds to the Royal Society—and we are sure it requires but to see its way clearly, to do something for our younger Metropolitan Hospitals.

REPORTS OF SOCIETIES.

ROYAL SOCIETY,

Dec. 21.

THE BAKERIAN LECTURE, "ON THE DIFFUSION OF LIQUIDS."

By Professor GRAHAM.

The Lecturer commenced by observing, that a salt or other soluble substance once liquefied and in a state of solution, is evidently spread or diffused uniformly through the mass of the solvent, by a spontaneous process. It has often been asked whether this process is of the nature of the diffusion of Gases, but no satisfactory answer to the question appears to be obtained, owing, he believed, to the subject having been studied chiefly in the operations of endosmosis, where the action of diffusion is complicated and obscured by the imbibing power of the membrane, which appears to be peculiar for each soluble substance but not necessarily connected with the diffusibility of the substance in water. Gay Lussac proceeded upon the assumed analogy of gaseous and liquid diffusion in the remarkable explanation which he suggested of the cold produced on diluting certain saline solutions, namely, that the molecules of the salt expand into the water like a compressed gas admitted into additional space. The phenomena of solubility were at the same time considered by that acute philosopher as radically different from those of chemical affinity, and as the result of an attraction which is of a physical or mechanical kind. The characters indeed of these two attractions are strongly contrasted. Chemical combination is uniformly attended with the evolution of heat, while solution is marked with equal constancy by the production of cold. The substances which combine chemically are the dissimilar, while the soluble substance and its solvent are the like or analogous in composition and properperties.

It was further premised, that two views may be taken of the physical agency by which gaseous diffusion itself is effected, which are equally tenable, being both entirely sufficient to explain the phenomena. On one theory, that of Dr. Dalton, the diffusibility of a gas is referred immediately to its elasticity. The same spring or self repulsion of its particles, which sends a gas into a vacuum, is supposed to propel it through and among the particles of a different gas. In the other theory, the existence of an attraction of the particles of one gas for the particles of all other gases is assumed. This attraction does not occasion any diminution of volume of gases on mixing, because it is an attraction residing on the surfaces of the gaseous molecules. It is of the same intensity for all gases; hence its effect in bringing about intermixture is dependent upon the weight of the molecules of the gases to be moved by it, and the velocity of diffusion of a gas comes to have the same relation to its density on this hypothesis as upon the other. The surface attraction of molecules assumed, will recall the surface attraction of liquids which is found necessary to account for the elevation of liquids in tubes, and other phenomena of capillary attraction.

The apparatus used in studying the diffusion of salts and other substances into water was very simple. It consisted of an open phial, to contain the solution of the salt to be diffused, which was entirely immersed in a large jar of pure water, so that the solution in the phial communicated freely with the latter. Phials cast in a mould of the capacity of four ounces of water, or more nearly 2,000 grains, were generally employed, which were ground down to an uniform height of 3.8 inches. The neck was 0.5 inch in depth, and the aperture or mouth of the phial 1.25 inch in diameter. The phial was filled up with the solution to be diffused till it reached the point of a pin, dipping exactly 0.5 inch into the mouth of the bottle. This being the solution cell or bottle, and the external jar the "water jar," the pair together form a "diffusion cell." The diffusion was stopped generally after seven or eight days, by closing the mouth of the phial with a plate of glass, and then raising it out of the water jar. The quantity of salt which had found its way into the water jar—the diffusion product as it was called—was then determined by evaporating to dryness.

The characters of liquid diffusion were first examined in detail with reference to common salt.

It was found, first, that with solutions containing 1, 2, 3, and 4 per cent. of salt, the quantities which diffused out of the phials, into the water of the jars, and were obtained by evaporating the latter, in a constant period of eight days, were as nearly in proportion to these numbers, as 1, 1.99, 3.01, and 4.00; and that in repetitions of the experiments, the results did not vary more than 1-40th part. The proportion of salt which diffused out in such experiments amounted to about 1-8th of the whole.

Secondly, that the proportion of salt diffused increases with the temperature; an elevation of 80° Fahr. doubling the quantity of chloride of sodium diffused in the same time.

The diffusibility of a variety of substances was next compared, a solution of 20 parts of the substance in 100 water being always used. Some of the results were as follows, the quantities diffused being expressed in grains:—Chloride of sodium 58.68, sulphate of magnesia 27.42, sulphate of water 69.32, crystallized cane sugar 26.74, starch sugar 26.94, gum arabic 13.24, albumen 3.03. The low diffusibility of albumen is very remarkable, and the value of this property in retaining the serous fluids within the blood vessels at once suggests itself. It was further observed, that common salt, sugar, and urea, added to the albumen under diffusion, diffused away from the latter as readily as from their aqueous solutions, leaving the albumen behind in the phial. Urea itself is as highly diffusible as chloride of sodium.

In comparing the diffusion of salts dissolved in ten times their weight of water, it was found that isomorphous compounds generally had an equal diffusibility, chloride of potassium corresponding with chloride of ammonium, nitrate of potash with nitrate of ammonia, and sulphate of magnesia with sulphate of zinc. The most remarkable circumstance is, that these pairs are "equi-diffusive," not for chemically equivalent quantities, but for equal weights simply. The acids differed greatly in diffusibility, nitric acid being nearly four times more diffusive than phosphoric acid; but these substances also fell into groups, nitric and hydrochloric acids appearing to be equally diffusive; so also acetic and sulphuric acids. Soluble subsalts and the ammoniated salts of the metals present a surprisingly low diffusibility. The quantities diffused in similar circumstances of the three salts, sulphate of ammonia, sulphate of copper, and the blue ammonio-sulphate of copper being very nearly as 8, 4, and 1.

When two salts are mixed in the solution cell, they diffuse out into the water atmosphere separately and independently of each other, according to their individul diffusibilities. This is quite analogous to what happens when mixed gases are diffused into air. An important consequence is, that in liquid diffusion we have a new method of separation or analysis for many soluble bodies, quite analogous in principle to the separation of unequally volatile substances in the process of distillation. Thus, it was shown that chlorides diffuse out from sulphates and carbonates, and salts of potash from salts of soda; and that from sea-water the salts of soda diffuse out into pure water faster than the salts of magnesia. The latter circumstance was applied to explain the discordant results which have been obtained by different chemists in the analysis of the water of the Dead Sea, taken near the surface; the different salts diffusing up, with unequal velocity, into the sheet of fresh water, with which the lake is periodically covered during the wet season.

It was further shown that chemical decompositions may be produced by liquid diffusion. The constituents of a double salt of so much stability as common alum being separated; and the sulphate of potash diffusing in the largest proportion. In fact, the diffusive force is one of great energy, and quite as capable of breaking up compounds as the unequal volatility of their constituents. Many empirical operations in the chemical arts, it was said, have their foundation in such decompositions.

Again, one salt, such as nitrate of potash, will diffuse into a solution of another salt, such as nitrate of ammonia, as rapidly as into pure water; the salts appearing mutually diffusible, as gases are known to be.

Lastly, the diffusibilities of the salts into water, like those of the gases into air, appear to be connected by simple numerical relations. These relations are best observed when dilute solutions of the salts are diffused from the solution cell, such as 4, 2, or even 1 per cent. of salt. The quantities diffused in the same period of seven days from 4 per cent. solutions of the three salts, carbonate of potash, sulphate of potash, and sulphate of ammonia, were 10.25 grains, 10.57 and 10.51 grains respectively; and a similar approach to equality was observed in the 2, 4, and 6 per cent. solutions of the same salts. It also held at different temperatures. The acetate of potash appeared to coincide in diffusibility with the same group, and so did the ferrocyanide of potassium. The nitrate of potash, chlorate of potash, nitrate of ammonia, chloride of potassium, and chloride of ammonium formed another equi-diffusive group. The *times* in which an equal amount of diffusion took place in these two groups, appeared to be as 1 for the second to 1.4142 for the first, or as 1 to the square-root of 2. Now, in gases, the times of equal diffusion are *the squares of the densities of the gases*. The relation between the sulphate of potash and nitrate of potash groups would therefore fall, to be referred, to the diffusion molecule or diffusion vapour of the first group having a density represented by 2, while that of the second group is represented by 1.

The corresponding salts of soda appeared to fall into nitrate and sulphate group also, which have the same relation to each other as the potash salts.

The relation of the salts of potash to those of soda, in times of equal diffusibility, appeared to be as the square-root of 2 to the square-root of 3; which gives the relation in density of their diffusion molecules, as 2 to 3. Hydrate of potash and sulphate of magnesia were less fully examined, but the first presented sensibly double the diffusibility of sulphate of potash, and four times the diffusibility of the sulphate of magnesia. If these times are all squared, the following remarkable ratios are obtained for the densities of the diffusion-molecules of these different salts, each of which is the type of a class of salts,—hydrate of potash 1, nitrate of potash 2, sulphate of potash 4, sulphate of magnesia 16; with nitrate of soda 3, and sulphate of soda 6.

In conclusion it was observed, that it is these diffusion molecules of the salts which are concerned in solubility, and not the Daltonian atoms or equivalents of chemical combination; and the application was indicated of the knowledge of the diffusibility of different substances, to the study of endosmose, in which the effect due to diffusibility should be distinguished and separated from the proper action of the membrane employed.

CORRESPONDENCE.

MEDICAL WITNESSES AND THE CORONERS' ACT.

[To the Editor of the Medical Times.]

Sir,—Can I expect to enlist your sympathies on the side of the unfortunate victims of the strange anomaly in the Coroners' Act, perpetrated, as I suppose, by the great pseudo-medical reformer of the day?

I allude to that unaccountable provision which excludes house-surgeons, &c., from receiving any remuneration for evidence given before the Coroner.

Is it, Sir, that the house-surgeons of England are so handsomely beneficed, as to put them far above any necessity for remuneration for extra work? Is it not rather, Sir, an undeniable fact that, as a body, they receive as small a pecuniary recompense as any body of professional men? What were the reasons that induced the honourable M.P. to introduce such a clause is to me a perfect mystery; and very much should I like to hear on what grounds he can logically demonstrate the justice of the proceeding. But what, Mr. Editor, is to be done? Should the aggrieved individuals petition Parliament directly on the subject, or in petitioning for medical reform generally, could a clause about this matter be incorporated into the Petition?

Do, Sir, give a little wholesome advice; and believe me, Sir, your most obedient servant,

Durham, Dec. 20, 1849. A HOUSE-SURGEON.

SELF-SUPPORTING DISPENSARIES.

[To the Editor of the Medical Times.]

SIR,—You are probably, as a Medical Journalist, aware of the many anxious attempts I have made to introduce "*Self-Supporting Dispensaries*" to the notice of the Medical Profession in London. These attempts have hitherto been met in the most disgraceful manner by the uneducated and unlicensed dealers in drugs, counter-pbysicians, and blue-bottle surgeons.

The Councils of the Royal Colleges and of the Hall, although not parties, have, by their coldness and indifference to my plans, which are calculated to improve the character of the Profession, as much as the physical condition of the poor, condemned them, and that without a hearing, as if the honour and respectability of the Profession was nothing to them. I am about to make another attempt. Dr. Cormack, and, I believe, nearly all the other medical men of Putney, have agreed upon the establishment of a "*Self-Supporting Dispensary*;" and I have engaged to be there on the 9th of January, in order to give the public an address, explanatory of my views on the subject.

I think it very likely, Mr. Editor, that some of those who fear their craft is in danger, may try to put me down. They have tried, backed by an unprincipled Medical Press, and done such things ere now. I, therefore, beg the favour of your attendance personally, or by your representatives, that you may give a report of the proceedings in such a way as you see fit and true. I ask no favour, and I court no patronage; but I claim the aid of the impartial Press.

All I require is a fair audience for my favourite plan of usefulness, and wherever, and whenever I have an opportunity, I shall continue to devote my humble talents to promote this plan of disciplined charity. I do not intend to interfere, in any way, with the social and political divisions, which, however, I fear too much distract the attention of my countrymen from comprehensive plans of utility, which might be brought to bear upon, and operate a beneficial change in the prevailing miserable physical condition of the poor. There is no other means under Heaven by which so much charity can be established between man and man, as by *Self-Supporting Dispensaries*.

I remain your humble servant, &c.,

D. L. SMITH.

Southam, Warwickshire, Dec. 30, 1849.

DR. HALL ON CHOLERA.

[To the Editor of the Medical Times.]

SIR,—A very serious error has been committed in the *Medical Times* of the 29th inst., by attributing to me an honour to which I have no claim whatever. Among the Original Contributions appears an essay "On Cholera, by William Hall, M.D., late Physician to the English Embassy at the Court of Persia." This very excellent Paper was addressed to me, in a letter, by my eminent friend, Dr. C. W. Bell, K.L.S., of Manchester; and at the request of Dr. Massy, Secretary to the Pathological Society of Exeter,—I having Dr. Bell's permission to make such use of his valuable communication as I should think fit for the benefit of the Profession,—Dr. Massy was allowed by me to read it to the Society in question. Neither Dr. Bell nor I, however, gave leave for its insertion, by Dr. Massy, in the *Medical Times*, and had some time ago transmitted it to the Editor of the *Provincial Medical and Surgical Journal*, for insertion in that Periodical.

I beg you will do me the favour to correct this error in your next Number.

I have the honour to be, Sir,

Your most obedient Servant,

WILLIAM HALL, M.D.

12, Clifton-place, Exeter, Dec. 31, 1849.

MEDICAL ATTENDANCE IN EMIGRATION VESSELS.

[To the Editor of the Medical Times.]

SIR,—As emigration has become absolutely necessary in the present state of society, it becomes the duty of every one to make the system as perfect as possible. Within the last two years the Government have paid more attention to the subject, and have established a variety of regulations, conducive to the health and comfort of the emigrant; yet among these improvements they have almost entirely overlooked the most important circumstance connected with the welfare of the emigrant, viz., the "medical attendant." The Government agents certainly insist upon the medical man possessing some diploma or qualification, but as to experience, skill, and character, these are left to the discretion of the charterer or owners of the vessel. The consequence is, the charterer or owners, whose object is to economise in every possible way, endeavour to procure those who will take the smallest remuneration. Experience, skill, and character being, therefore, a secondary consideration, parties are appointed who have no character or ability, or young men who have no experience, and have just passed their examinations; and very recently a person was appointed who had false diplomas, and who, upon being prosecuted by the Government, was found to be insane.

I understand that, during the prevailing epidemic, the owners of these vessels were compelled to be a little more liberal; even their ships were actually detained while they were higgling with the surgeon about a few pounds.

It is unnecessary to point out how much depends upon the character and ability of a well-educated medical man in a vessel containing from two to three hundred individuals, pent up for four or five months; in fact, the medical man should be, in a great measure, the superintendent, as it is well known that the captain and officers, however well skilled in their profession, are too frequently men of little or no education, and, therefore, unqualified to possess a proper influence over a large number of individuals; and besides these considerations, what misery and suffering are entailed upon the emigrant, provided any malignant disorder should arise, when the surgeon is deficient in experience, skill, and ability.

It is rather an anomaly, that to the vessels chartered by Government men of experience and ability are appointed, and liberally remunerated, and it is surprising that, as the evil might be so easily remedied, the Government have not compelled the owners of those vessels chartered by private parties to be more particular. There is no doubt, that if the remuneration was liberal there would be no difficulty in obtaining plenty of men of experience and character; and I would suggest a scale of remuneration similar to what the Government allows, with some modifications as to distance. For example, if the distance should be as far as India or Australia, then the medical attendant should receive 10s. per head upon every individual landed,—man, woman, or child; if the distance be about the Cape or America, then after the rate of 5s. per head. The captain, officers, and men being attended gratuitously, in consideration of the drugs, &c., being provided by the owners. These drugs, &c., also require looking after, as from the same principle of economy, the cheapest are considered the best, and you may [suppose how the surgeon must be disappointed in the effects of his remedies.

I am, Sir, your obedient Servant,

December 17, 1849. MEDICUS.

POPLITEAL ANEURISM AND GUTTA PERCHA BOUGIES.

[To the Editor of the Medical Times.]

SIR,—I should wish to observe, in reference to your concluding remarks on my case of popliteal aneurism, that the principle of varying the point of pressure was adopted from the first; but there *was* a fault in the treatment, which cannot be too prominently brought before the Profession; and which was this, that the treatment by compression was commenced too soon, before the great local and constitutional excitement was sufficiently subdued. In consequence of this error, it was necessary to discontinue the pressure for two whole days subsequently, during which venesection and tartar emetic had to be employed. It is only an additional instance of the truth of the proverb, "the more haste the worse speed." However, fortunately, no permanent bad effect was produced. As to the use of electricity after perfect consolidation has taken place, I must say I cannot conceive how it could benefit the case; and, as a means of producing consolidation, I have a great objection to it, as I think it calculated to produce a dead instead of an organizable coagulum, and consequent suppuration of the sac. This objection also applies to the coagulation of the albumen of the serous fluid in hydrocele by means of electricity.

With respect to gutta-percha bougies, I take this opportunity of mentioning that I have, for the last twelve months, used no other. I make them myself, by cutting a gutta percha sole into slips, and rolling to the necessary size between two smooth mahogany boards, having first softened the material in boiling water. It is impossible for any accident to occur with these, as they possess more tenacity than any other flexible bougies I know of, and their cheapness is an important consideration to hospitals and the poorer class of patients. I also make styles for the lachrymal duct of the same material, which answer admirably; and I may add, that for the application of water dressing, the gutta percha sheet has completely superseded the oiled silk in my practice.

I am, Sir, your obedient servant,

Omagh, Dec. 23, 1849. H. THOMPSON, M.D.

PUBLIC HYGYENE.

[To the Editor of the Medical Times.]

SIR,—Your editorial remarks, both in the last number of the *Medical Times*, and in preceding ones, on Public Hygiene, ought to be printed in letters of gold; but, alas! I fear they are as if written on sand at the seashore. We have seen that the tide of disease and death flowed, and all was hurry and anxiety to do what should have been done long before, and which could not then be done without adding to the danger—the tide has ebbed, and the world has breathed again. Warnings, admonitions, the sable emblems of departed friends, all are "handwritings on the wall;" but the tide is once more flowing; this time bearing on its bosom music, dancing, masquerading, thoughtless pleasure, and the world forgets its punishment and its promises.

Little that I can say or write is probably worth your perusal, but I send you my Lecture on Health as an acknowledgement for the valuable information your pages have afforded me on vital statistics.

I am, Sir, yours most respectfully,

EDWARD T. ROE, M.D.

Princess-square, Plymouth, Dec. 24, 1849.

HEALTH OF LONDON DURING THE WEEK ENDING DEC. 29.

In the last week, the deaths registered in the metropolitan districts were 1053; the weekly average of this season, corrected for increase of population, is 1162. The mortality of last week is, therefore, less than the estimated amount by 109 deaths, and is nearly the same as that of the previous week. Of the 1053 persons, whose deaths are included in this Return, 841 had medical attendants, and written statements of the diseases which proved fatal, distinguishing in many cases the primary and secondary forms, are entered in the register-books; 15 had no medical attendance; in 15 cases the cause of death was not certified, and in these it does not appear whether or not the patients had professional aid. 7 children are returned as having died of suffocation in bed; 5 deaths are ascribed to intemperance, of which one was the case of a girl of 14 years, who died after 38 hours' illness, of congestion of the brain and other organs, from drinking gin; a child died of want; a man of 40 years, in the sub-district of St. Andrew East, of "exposure to cold and destitution," and a pork-butcher of 27 years, on the third day after admission into the workhouse of St. Martin-in-the-Fields, from the effects of "starvation and neglect." A woman who had no medical attendance died in Somers-town of "inflammation of the lungs;" she is stated to have arrived at the advanced age of 100 years. Tables accompany this Return, which show the deaths from cholera in each of the 135 sub-districts of London, in each week since October, 1848.

MORTALITY TABLE.

For the Week ending Saturday, Dec. 29, 1849.
(Metropolis.)

Causes of Death.	Total.	Average of Five Autumns.
All Causes	1053	1162
Specified Causes	1048	1153
Zymotic (or Epidemic, Endemic, and Contagious) Diseases	176	307
Sporadic Diseases:		
Dropsy, Cancer and other Diseases of uncertain or variable seat	58	49
Tubercular Diseases	152	178
Diseases of the brain, Spinal Marrow, Nerves, and Senses	135	125
Diseases of the Heart and Blood-vessels	40	40
Diseases of the Lungs, and of the other Organs of Respiration	185	214
Diseases of the Stomach, Liver, and other Organs of Digestion	43	65
Diseases of the Kidneys, &c.	15	11
Childbirth, Diseases of the Uterus, &c.	17	10
Rheumatism, Diseases of the Bones, Joints &c.	2	8
Diseases of the Skin, Cellular Tissue, &c.	2	1
Malformations	4	4
Premature Birth and Debility	25	23
Atrophy	21	18
Age	51	57
Sudden	45	12
Violence, Privation, Cold, and Intemperance	77	36
Causes not Specified	5	4

The following is the number of Deaths occurring from some of the more important special causes:—

Apoplexy	44	Heart	36
Bronchitis ...	78	Hooping-cough	24
Cholera.....	0	Hydrocephalus	24
Childbirth	11	Influenza	8
Convulsions....	42	Liver	10
Diarrhœa	9	Lungs	8
Dropsy	19	Measles	42
Erysipelas ...	9	Paralysis	21
Phthisis	115		
Pneumonia ...	69		
Scarlatina	25		
Small-pox	7		
Stomach	6		
Teething	5		
Typhus	31		
Uterus	6		

BIRTHS AND DEATHS.

	Births.	Deaths.	Births over Deaths.
Males	618	540	78
Females	608	513	95
Total.....	1226	1053	173

METEOROLOGY OF THE WEEK.

Day.	Sunday	Monday	Tuesday.....	Wednesday.	Thursday ...	Friday	Saturday ...	Means ...
Electricity.*	Nothing.	P. and active generally during the day.	P. and tension strong at each examination.	Nothing.	Nothing.	Nothing.	P. and tension weak during the morning.	
Rain in Inches.	0·00	0·02	0·00	0·00	0·00	0·00	0·00	sum 0·02
Amount of Horizontal Movement of the Air.	Miles. 50	25	25	155	110	170	190	sum 725
General Direction of Wind.	P.M. N.	W.S.W.	N.	W.	N.N.W.	N.N.W.	N.W.	
	A.M. N.N.E.	N. & S.W.	N.E.	S.W.	S.W. & N.W.	N.W.	S.W.	
Difference between the Mean Temperature of the day and the same day on an average of 7 years.	— 6·2	— 6·3	— 3·8	+ 0·7	— 0·2	— 13 0	— 6·8	— 5·1
Ditto. Dew Point.	29 0	28·9	28 2	36·6	28 7	18·9	23·9	27·7
Mean of Thermometer. Dry.	32·6	33·0	34·2	38·6	37·7	25·2	31·1	33·1
Mean of Barometer.	30·440	30·304	30·378	29·922	29·327	29·308	29 460	29·877

* In this Column, A. stands for Active; N. for Negative; and P. for Positive.

MEDICAL NEWS.

Apothecaries' Hall.—Names of Gentlemen who passed their Examination in the Science and Practice of Medicine, and received Certificates to Practise, on Thursday, Dec. 27, 1849:—George Clarke, Bath; Edward Golledge Pitt, London; Charles William, Whitby; William Vaughan Jones, Festiniog, N. Wales.

Obituary.—At Antigua, on the 13th ult., of yellow fever, Charles Dawsen, M.D., Surgeon to the 54th Regiment. On the 25th inst., John Lewis, Esq., Surgeon, formerly of Mark-lane.

Trinity College, Dublin.—Dr. John Banks, Physician to the Whitworth Hospital, and to the Lord-Lieutenant, has been elected King's Professor of the Practice of Medicine at Dublin University, on the Foundation of Sir Patrick Dun.

At the annual election of medical officers of the Ashton-under-Lyne Union on the 20th inst., the salary for the workhouse and Fever Hospital was reduced from 100*l.* to 90*l.* The cases during the past year were nearly 600. Some of the district salaries were reduced 20 or 30 per cent., and vaccination from 1*s.* 6*d.* to 1*s.* per case. Last year the workhouse salary was fixed at 100*l.*, and a *gentleman offered to take it at* 90*l.* Now the Guardians *fix the salary at* 90*l.*, and one candidate (M. R. C. L. and L. A. C. of 1827 or 1828) offers to attend the workhouse and hospital *gratis*, if the Union will provide *drugs*, which he *guarantees* will not cost 50*l.* This the Guardians declined, and elected a gentleman at 90*l.*, the sum advertised. The Ashton Board has hitherto evinced a liberal spirit compared with many Unions, yet, no doubt, will reduce the remuneration of medical officers to the *minimum*, whilst their profitless appointments are so eagerly sought for. The members of the Profession are frequently more to blame than the Boards of Guardians, as this instance proves.

Medical Reform. — The following Petition has been addressed to the Right Honourable Sir George Grey, Bart., one of Her Majesty's principal Secretaries of State:—"As Chairman of a Committee of members of the Medical Profession residing in Manchester and its neighbourhood, appointed at a public meeting to watch the progress of the Medical Reform question, I am directed respectfully to represent to you, that a statement has appeared in the public journals to the effect, that the Council of the Royal College of Surgeons of England are about to Petition the Crown for the grant of a Charter which shall amend and rectify the anomalies and deficiencies of that conceded in 1843. The Manchester Committee having maturely considered this reported proceeding of the Council of the College, in its bearings upon medical legislation, would respectfully impress upon you the justice and expediency of withholding all recommendation to Her Majesty, in conformity with such Petition, until the Fellows and members at large have had the outlines of the proposed Charter submitted to them for examination and discussion. The Committee beg further to represent to you that the Charter of 1843 was granted without any such previous notification; that, when published, after its concession, a condemnation of its provisions, all but unanimous, came from the Profession at large; and that this circumstance has constituted the great obstacle to all recent attempts at medical legislation. Finally, the Committee would express their conviction, that the grant of a Charter to the College of Surgeons, which should bring the Institution into harmony with its members, who constitute the great majority of English Practitioners, would remove all serious impediment to a satisfactory settlement of the question of medical reform. (Signed on behalf of the Committee) W. Watson Beever, Chairman.—Manchester, Dec., 1849.

The French Institute.—One of the oldest Members of the Institut, M. Quatremere de Quincey, lately died at the patriarchal age of 96. He was Perpetual Secretary of the Academy of Fine Arts, and had been Member of the first Legislative Assemblies during the Revolution of 1798.

Cholera Rewards at Exeter.—Two wardmotes, as we presume we are to call them, have been held at Exeter, to decide respecting the gratuities recommended by the Sanitary Committee, to be paid to the medical officers, &c., for services rendered during the late epidemic. At the meeting of West Ward, it was unanimously decided, that the clerk and medical officers were sufficiently paid already, and the principle of gratuities to salaried officers discountenanced. A Guardian who was present seemed to have some slight glimmering of truth through the Cimmerian darkness of ignorance and falsehood by which he was surrounded; and he expressed an opinion, that the medical men ought to be paid for their extra services. He remarked, however, strangely enough, that the undertaker, who he called the more deserving man, had been overlooked. He had had the disagreeable and dangerous task of burning the clothes, and ought to be better paid therefore. He *only received* 40*s.*, 30*s. of which he paid to a man to do the work* for him, and 10*s.* for the field in which it was done; so that, according to this sapient, delegating the burning the clothes of the cholera dead to another was a more disagreeable and more dangerous task than constant professional attendance on the sick for weeks and months together. The undertaker, however, had a better knowledge of his services, for, at the South Ward meeting, he entirely disclaimed all right to additional remuneration. At the last-named meeting, a person named Pope had the brutal insolence to assert that the *extra practice obtained by the medical men while attending cholera cases, was a sufficient compensation for their services*, and this resolution absolutely had a seconder. Fortunately for the reputation for honesty and good sense of the South Ward, it was not carried, but resolutions similar to those of the West Ward were; it being further determined that a subscription be opened for the purpose of rewarding the medical men. This was not carried without opposition. Should the cholera revisit Exeter, we trust the medical men then will demand a written pledge for additional remuneration ere they commence their disagreeable and dangerous duties.

TO CORRESPONDENTS.

"Mr. Ramsbotham's" correspondence with the Halifax Guardians has been received. We propose to examine the particulars of the case referred to in those letters, if possible, next week.

"Mr. Brady" may rest assured, that the pages of the "Medical Times" will never be sullied by ungentlemanly abuse. At the same time, the Editor will fearlessly exercise the right he possesses, not only of criticising, severely if need be, particular cases and systems of medicine, but also of exposing individual ignorance or dishonesty, if such exposure be necessary for the good of the Profession and the interests of the community.

A notice of Dr. Downing's little Work on Tic Douloureux is in type.

"Dr. Reid Clanny" is reminded, that those who live in glass houses should not throw stones; and that when "players go to cuffs," they must expect "vile blows and buffets."

We beg particularly to call the attention of our readers to a letter from Mr. Smith, of Southam, and to inform them, that that gentleman will deliver a Lecture on the subject of Provident and other Dispensaries, on Wednesday, the 9th January, at eight, p.m., in the Hall of Putney College; when he will explain the working of the Provident Dispensaries which have been established in Northampton, Coventry, Burton-on-Trent, and other places. We strongly recommend our readers to attend Mr. Smith's Lecture on the 9th. The subject is one of vital importance, and we are much inclined to think, if Mr. Smith's views had been generally adopted, that two-thirds of the evils of the Poor-law and its Boards of Guardians, as affecting the best interests of the Profession, would have been obviated. Were medical men true to themselves, they might defy all the dull-pated and wooden-headed councillors that ever presumed to sit in judgment on them.

"Mr. Wardropp's Work on the Heart."—As soon as the Author will furnish us with the remainder of the copy, we will complete the Work, and devise a means of supplying our Subscribers—we can do no more.

Our friend at Brussels is thanked. We shall use his information when occasion requires.

"A Constant Reader."—We will endeavour to procure the paper alluded to, and give it an early insertion in our Journal.

"Gutta Percha Bougies."—We have received specimens of gutta percha bougies from the Company in the City-road, and are happy to perceive that the method the Company now employ in their manufacture totally precludes the possibility of their *untwisting*. We beg particularly to call the attention of our readers to the subject, and we recommend them to visit the establishment at Wharf-road, City-road.

"Scotus" writes:—"Supposing I were an M.D. Edin., and M.R.C.S. Lond.; had served five years' apprenticeship to the Professor of Surgery of Edinburgh University; had had six months' practical pharmacy in the laboratory of the Edinburgh Infirmary; with certificates of every class required by the regulations of the Apothecaries' Hall; should I be eligible for examination at that Board?"

[Not without a certificate of apprenticeship, of five years, to a legally-qualified apothecary. The apprenticeship is absolutely necessary.]

"Mr. McClure, Assistant-Surgeon of H.M.S. Indefatigable," writes:—"I have my answer prepared both for Dr. Miller and Mr. Chubb. I would have sent it by this day's post, but that I require to refer to the hospital reports to confirm the accuracy of my statements. You shall positively have it by to-morrow's post; so I hope you will give me a column in Saturday's 'Times' for its insertion."

[We promise Mr. McClure the column he requests; but we had not received his MS. when we went to press.]

ORIGINAL LECTURES.

LECTURES
ON
CLINICAL MEDICINE.
DELIVERED AT UNIVERSITY COLLEGE HOSPITAL.

By E. A. PARKES, M.D., Lond.:
Member of the Royal College of Physicians, Professor of Clinical Medicine in University College, and Physician to the Hospital.

LECTURE II.

GENTLEMEN,—The case I bring before you to-day differs considerably from the one we discussed at our last Lecture, but is of even greater importanec, as being a more common and every-day affection. I shall also be enabled, after we have briefly reviewed it, to allude in this or in a subsequent Lecture, to some important practical points connected with the deranged mechanism of the heart, especially to the changes in the capacities of its cavities, compared with the strength of its walls.

On the 18th of April, a woman, Mary Saxton, aged 57, was admitted into Hospital. (a) The first aspect of the case strongly resembled that of Mary Gartland. When I first saw the patient she was sitting up in bed, breathing with the utmost difficulty, with livid lips, darkly flushed and dusky face, and an anxious pained expression. There was extreme anasarca of the lower extremities, and of the abdominal walls. There was a small quantity of fluid in the peritonæum, but none in the pleuræ. Every now and then a violent paroxysmal cough came on, which was followed by copious, rather viscid, greenish-yellow masses of sputa, surrounded by a frothy fluid.

The history of the case was briefly this. She was a married woman, a laundress, born of healthy parents, had lived temperately and moderately well. She had been subject to shortness of breath for more than thirty years. Had never had rheumatism. Thirty years before had had hæmoptysis. Except the shortness of breath, which she thought little of, she considered she had always had good health. A year before admission she suffered from what she called "asthma and dropsy," from which she soon recovered. Sometime after this she had an "attack at the heart," from which she suffered much for three months, and then improved somewhat, still feeling very ill, till five weeks before admission. At this time she got worse, the legs became much swollen, and the dyspnœa very distressing.

The state of the organs on admission was as follows;—First, the lungs.

I have already mentioned that the patient was suffering from complete orthopnœa, in fact, she had not been able to lie down for many days. She was breathing, with great effort, about thirty to thirty-two times per minute. The ribs moved comparatively little; the form of the thorax was moderately rounded, without any partial bulgings; the percussion note was everywhere resonant; over both bases abnormally so. Both anteriorly and posteriorly, the lungs descended lower than usual, and they encroached on the prærcordial region. Over the whole of the lungs there were coarse muco-crepitant and mucous rhonchi, mixed, particularly in front, with whistling and cooing rhonchi. Expiration was somewhat increased—there was no particular alteration of voice. These, which were the only positive signs, indicated the existence of generally diffused bronchitis, occurring in lungs which were emphysematous; at least, the exaggerated clearness of the percussion note at some points, and the manifest increased size of the lungs, coupled with the history of the case, which informed us of old standing and permanent dyspnœa, seemed to warrant this conclusion, even in the absence of more definite symptoms. The heart gave us the following signs. It was acting regularly about 90 times per minute. Sometimes, the patient told us, there was palpitation. The impulse was extremely feeble; although the patient was leaning forward, I could not determine for a long time where the point of the heart was striking, but, after some time, it was made out to be outside, and a little below the left nipple; there was no pulsation elsewhere in the præcordial region. The extent of dulness was defined with great difficulty; in the centre of the præcordial space the percussion note was as resonant almost as elsewhere; but, after two or three examinations, the upper limit of the dulness was fixed between the third and fourth ribs; the inner boundary was apparently a little inside the left edge of the sternum; the outer was undefined, but was beyond the vertical level of the nipple. At the base there was a very faint systolic murmur in the first right intercostal space, close to sternum; it was carried down from this point to midsternum, where it became much increased in intensity, and it increased still as the apex was approached; it was not heard at all in the second left interspace. The second sound at the base was not changed. At the apex there was a loud systolic murmur, heard over a considerable space; it was at its maximum, not at the point where the apex was supposed to be, but inside this, under the left nipple, and was very loud also close to the sternum; it was blowing, and had a certain roughness about it, but no rasping; the second sound was sharp and well-defined; no pulsation in any of the arteries; the radial pulse regular, very small, and weak. Both the external jugular veins pulsated, the left more than the right; they also filled slowly from below, when they were emptied and pressed upon at the upper part of the neck.

What now was the state of this heart? First, an extremely feeble impulse is chiefly produced by three circumstances; fluid in the pericardium, great weakness of the heart itself, with or without dilatation, or interposition of lung between it and the side of the chest. Which of these circumstances was existent here, was at once evident from these two positive signs—not to mention other considerations—first, that the sounds were by no means deficient in intensity and power; on the contrary, they proceeded evidently from a strong, vigorous heart; this would not have been the case either in attenuation of the heart's walls or weak action from other causes, or in hydro-pericardium of such amount as to abolish impulse; secondly, the percussion note rang with great clearness in the very centre of the præcordial region, proving the overlapping of the lung. But if we had had in this case low muffled and feeble sounds, appearing to come from a distance, then we should have found it extremely difficult to say what the condition of the pericardium, or of the muscular substance, may have been. But, luckily, such cases as these are rare, as both hypertrophied hearts and distended pericardia usually thrust aside to a greater extent than in the present case even emphysematous lungs, and can then be detected by the amount and kind of dulness, and other symptoms proper to each particular state. In the present case, we judged from the sounds that the heart was acting with considerable force. The importance of attending to the heart's sounds, as indicative of the vigour of the muscular contractions, and, in an indefinite degree, of the size of the heart, cannot be too strongly put before you, as it is from these, and from the general symptoms, that we are obliged often to judge of the size of the heart, when emphysematous lungs prevent us from determining it more accurately by percussion.

We had, then, evidently, a heart acting strongly beneath a thick stratum of lung which abolished impulse. Then, with some difficulty we made out a kind of outline of the heart, which showed us that it was not higher or lower than usual, but rather more to the left than it should be, and, perhaps, more to the right, allowing for the emphysematous lung. Now, these were very significant signs; they seemed to show that the left ventricle was enlarged, the right ventricle, also, probably enlarged, but not to any very great extent, as, if it had been, it would have been more to the right and downwards. Often, in great emphysema with its most frequent attendant, dilated hypertrophy of the right ventricle, the cardiac dullness is found low down close to the left of the sternum, under the cartilages of the sixth and seventh ribs, and extending even into the epigastrium. This is the case with our patient, M'Donald, now in the wards. Now, this has been attributed by some entirely to displacement of the heart consequent on emphysema; but, I think, in these cases it will often be found, that emphysema does not play the only part; the heart reaches lower than usual, and its upper part is more covered by lung, but it is not always absolutely altogether lower, nor, if absolutely, is this owing only to emphysema. Emphysematous lungs may, indeed, *per se*, sometimes lower the heart, by depressing the diaphragm, but whenever we find the heart's dullness lower than normal, and close to the left of the sternum, we may, indeed, often anticipate the discovery of emphysema, but I think we shall generally find enlargement of the right heart also.

The loud systolic murmur at the apex was indicative of mitral regurgitation. This seemed at least probable from its loudness under the left nipple. We had no evidence that the mitral orifice was contracted; had it been so, with the amount of emphysema which existed, the pulmonary lesions would have been still more marked; we should have had bloody sputa, and at last pulmonary apoplexy. But also we had tricuspid regurgitation; this was absolutely proved by the jugular pulsations, and the fillings of the veins from below. Again, Dr. Blakiston's observations, which prove the important part which tricuspid regurgitation plays in general dropsy, naturally would have supported the idea of tricuspid regurgitation in this case, had the absence of more positive signs rendered it necessary for us to take this argument into account. The existence of emphysema also rendered it likely that there was hypertrophy of the right heart, for this is the natural consequence of emphysema, and is often ne antecedent of tricuspid regurgitation.

But as we admitted tricuspid regurgitation, may not the murmur at the apex have been attributable to it? This seems very likely, but as tricuspid regurgitation is very frequently unattended by any murmur, whenever we decide that a murmur is from the tricuspid orifice, it should be unequivocally over the right ventricle, as it was in the case of Mary Gartland.

In addition to the murmur at the apex, we had a systolic murmur at the base, heard along the aorta. This may have been an obstructive aortic murmur; but I think, possibly, from its exceeding faintness and gradual loss as we passed upwards, that it may have been a transmitted murmur from the mitral orifice: in a case of this kind, to render a murmur unequivocally aortic, there should be a space between it and the mitral murmur, in which the morbid sounds are less intense than at either of their seats or points of origin, or of manifestation.

The pulse was very weak and compressible, as it usually is in mitral regurgitation, and as it may be in aortic obstruction.

What was the state of the pericardium? We were certain, from the comparative want of dulness, and the character of the heart's sounds, that there was little, if any, fluid in the pericardium. But we had no certain evidence about adhesion. The probability, from negative evidence, was, that the pericardium was non-adherent, and, therefore, presumably healthy.

The condition of this heart then was as follows: its pericardium was probably healthy, its left ventricle was probably dilated and hypertrophied to a certain extent, as it extended more to the left than usual; there was mitral regurgitation, judging from the systolic murmur at the left apex. There was dilated hypertrophy of the right ventricle to some extent, tricuspid regurgitation, judging from the jugular pulsation and refilling from below, from the dropsy, and from the old emphysema; there may have been very slight aortic obstruction. The character of the sounds seemed to indicate that the muscular substance was tolerably healthy.

There was some difficulty in determining the state of the liver, on account of the œdema of the abdominal walls, but we decided that the liver was not below the false ribs; its upper limit was quite undefined, so thickly was it covered by lung. But we had an indication that the liver was not much affected, in the small quantity of peritonæal effusion as compared with the excessive

(a) It should be mentioned, that the formal Clinical Lectures given by the Physicians at University College Hospital are summaries of the most important features of the cases, given after the patients' discharge. In addition, during the patients' stay in Hospital, the case is discussed, as far as can be done, at the bedside.

anasarca. This seemed to show that the effusion into the peritonæum followed the impediment to the portal circulation, produced by the stagnation in the lungs and heart. Had the liver itself been much diseased, the ascites would have corresponded in intensity with the anasarca.

We could not determine the size of the spleen, on account of the state of the abdominal walls.

The urine, on the admission of the patient, and for some time afterwards, presented characters somewhat similar to its condition in Mary Gartland. It was scanty, seldom reaching more than from 12 to 20 oz. in twenty-four hours, high-coloured, of a specific gravity of 1020 to 1024, strongly acid, and depositing amorphous lithates. But, in addition, it contained a certain amount of albumen, when coagulated, forming about one-fifth or one-sixth of the bulk of the liquid. Now, what did this signify? Had we here renal disease in addition to cardiac and lung disease? And if so, what share had the renal disease in producing the dropsy? On examining the urine attentively, it was evident that it did not present the characters of the urine in Bright's disease; it did not present the peculiar brownish or opaline colour; in the sediment we had never any casts of tubes or of epithelial nuclei from the urinary tubules; its specific gravity was not low; it was too acid. And although none of the characters here implied are absolutely essential to the urine in Bright's disease, still, when they are all absent, the chances of the albumen being dependent on Bright's disease is diminished. Again, we had other conditions here which are known sometimes to produce albuminous urine; we had tricuspid regurgitation and general venous congestion. However, at first we did not decide the case. While it was evident that the pulmonary and heart diseases were the main causes of the dropsy, it did not seem improbable that there might be some superadded renal disease. The progress of the case, however, did not favour this opinion; for subsequently, when the patient began to improve, and the anasarca to disappear, the albumen disappeared altogether from the urine; and, for the last five weeks of the patient's stay in hospital, the urine became non-albuminous, more copious, reaching 35 to 40, and occasionally 50 oz., acid, and with occasional deposition of uric acid, or of amorphous lithates. It might be inferred, then, that the renal disease was trifling, or that the albuminous impregnation depended solely on the congestion following the tricuspid regurgitation. Which was the actual case here, I cannot decide. But, let me remark, in anticipation of a subject that we shall have hereafter to take up, that the differences which exist in equally severe cases of cardiac dropsy, in respect of albumen in the urine, are not readily explicable, unless we presume, that in the one case, the kidneys are a little altered in texture, although not sufficiently so to cause albuminuria without superadded congestion; while in the other case they are altogether sound. But, observations are wanted upon this point.

The history of this case, after the patient entered the hospital, need not detain us long. We commenced at once with the treatment for these cases, viz., the administration of hydragogue cathartics, (in this case we gave the bitartrate of potash, which produced copious watery alkaline motions,) and of expectorants, such as squills and camphor, with small doses of digitalis. Subsequently, we added acetate of potash in half drachm doses, with scoparium. We were obliged to give occasionally ammonia and wine, to sustain the patient under the influence of the purging. These measures, with acupuncture, and the regulated temperature of the ward, after a short time relieved the pulmonary affection; the heart's action became quieter, the murmurs diminished in intensity, but did not disappear; the jugular pulsation ceased; the patient was enabled to lie down; the peritonæal effusion disappeared first, and then the anasarca gradually diminished. The only new feature in the case was the occurrence of a little circumscribed dry pleurisy at the angle of the left scapula, which came on about the 21st of April; no effusion followed, and after being audible for some days the friction disappeared. On the 7th of May the albumen disappeared from the urine, and on the 8th the report mentions that the cough was much easier, the expectoration less viscid, the dyspnœa much less, so that the patient had lain down two hours the previous night; the lips and face were of a nearly natural colour, and the legs were certainly rather smaller. From this time she improved slowly, and on the 16th of June was discharged free, or almost free from anasarca, with a moderate cough, and with the breathing nearly as free as usual.

In contrasting this case with the other, you will see some important differences. Here evidently the point of departure of the disease was not in the heart, but in the lungs. Pulmonary emphysema, existent apparently during thirty years, had necessitated, as usual, a gradually-augmented right ventricle to force on the blood through the lungs. In these cases, however, a nice balance is often preserved, and, provided nothing untoward happen, the hypertrophied right ventricle is in emphysema a conservative change. Sometimes, however, as in this case, some accidental circumstance, such as the supervention of bronchitis, occurs, and then the hypertrophied right heart, unable to force on the blood through the lungs, begins to drive it through the tricuspid orifice, which may itself have become dilated coincidently with the ventricle; and, if its flaps have not proportionably increased, may oppose but a feeble barrier to the forcible current. Then follows, as a matter of course, stagnation of the general circulation, and œdema of the feet passing into anasarca. If this proceeds to a certain extent, the left heart becomes engaged, inasmuch as it experiences an opposition in the general circulation; hypertrophy and mitral regurgitation may follow here, and would more often follow, were it not that the supply of blood to the left side of the heart is frequently very much diminished in amount. If mitral regurgitation frequently occurred in these cases, the lungs would suffer still more, from the blood being forced back upon them through the patent mitral orifice. In this instance it seemed that there was mitral regurgitation, though, whether it originated in this way, or in an attack of endocarditis, at the time the patient suffered from the "asthma," cannot be determined.

The case we have discussed to day gives us one of the most simple forms of cardiac disease consequent on lung affection. The case we discussed last week gave us a simple form of lung affection consequent on one form of heart disease. Either form may merge into the other, or may be accidentally combined with the other, or may be combined with other forms. Thence ensue numerous phases of heart and lung affection, the relative bearing of which to each other may be generally detected by acquiring an accurate knowledge of the simple and elementary conditions.

ORIGINAL CONTRIBUTIONS.

RETROVERSION OF THE UTERUS AS A CAUSE OF STERILITY.

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I will close the subject of retroversion, as a cause of sterility, with the following case:—

Mrs. J., aged 34; a middle sized delicate blondine—married 11 years, has had 2 children and 9 miscarriages.

June 30.—Unable to rise from severe pain of sacrum and in the groin, greatly increased by standing, leucorrhœal discharge with occasional loss of blood—bowels irritable and disposed to diarrhœa, or else are very confined—tongue glazed—pulse feeble and quick.

Her first child was born nine or ten months after her marriage, between which and her second child, she had seven abortions, each of which occurred during the first eight weeks of pregnancy; since the birth of her second child she has had two more abortions. Previous to marriage, the catamenia were healthy but inclined to be profuse. Her first abortion was accompanied by a severe flooding. About half a year ago an eminent provincial practitioner, suspecting the presence of ulceration of the os, examined and ascertained the presence of retroversion; he applied Professor Simpson's uterine supporter, but it produced much irritation, constant discharge, and profuse catamenia.

Examination per Vaginam.—Os uteri turned forwards—large, soft, open, cervix hard; uterus much swollen, retroverted—the fundus is very tender. I replaced the uterus with ease, and the swollen and engorged state of the uterus instantly subsided. Let her keep the prone position.

Extr. taraxaci ʒi. liq.; calcis ʒviii. M. ft. mist.; cujus sumat cochl. magn. ij. ter die. ℞ extr. aloes aquosi ℈ii.; ext. hyoscyami ℈iss.; mastich. gr. xij. M. ft. pil. xx. quarum sumat j—ij. h. s.

℞ Liq. plumbi diacetatis ʒii.; decoct. papav. ʒviij. M. ft. lotio.

July 3.—Has carefully maintained the prone position ever since.

Examination per Vaginam. The os uteri is turned backwards, but it is swollen and very tender. Let her continue the prone position. Applic. hirud. vj. ori uteri—rep. mistura. ℞ pulv. guaiace. magnes. carb. ac. gr. x. o. m. In a short time afterwards she returned to her residence in the country.

August 27.—For the first two or three weeks after leaving London, she "went on famously;" walked and rode about, but her old symptoms returned after a catamenial period; her medical man on visiting her, found the uterus retroverted, he recommended her to continue on the prone couch, and advised leeches to the os uteri, which was considerably swollen.

Sept. 27.—Went on very well for a short time, and felt so relieved that she ventured to take a long walk several times, which at last brought back her old symptoms. Until this act of indiscretion the uterus had been free from pain, and, to her feelings, in its natural position, but ever since she suffered as before, and her sensations distinctly showed that it had become displaced.

Warned by this result she returned to the prone couch, determined to give it a thorough trial. The symptoms of displacement soon ceased, and in the course of a few weeks the catamenial period passed by without any appearance. She steadily continued upon the couch for at least two months, when the missing a second catamenial period, and the occurrence of other symptoms, gave her every reason for concluding that she was pregnant. The uterus rose out of the pelvis at the proper time, and now the retroversion being cured by the supervention of pregnancy, she was enabled to take her exercise with safety and benefit. She went her full time without any interruption, and was safely delivered, early in the following July, of a fine girl.

With the exception of one case, to which I alluded some time ago, I have never seen a healthy os and cervix uteri so completely metamorphosed by severe congestion and swelling from obstruction to the returing circulation as in this case. The circulation in the os and cervix seems to have been nearly as much impeded as if it had been encircled by a moderately tight ligature. It was three times its natural size, tense, throbbing, hot, and acutely painful. Within two or three minutes after the replacement of the uterus, it had diminished considerably; it was soft, lax, and bore the pressure of the finger without causing any severe pain. The irritable habit of the patient, the previous failure of the supporter in her case, the state of severe suffering and uterine congestion in which I found her forbade me to make another trial of this instrument, and left me no choice but recourse to the prone couch, to the confinement of which she was at first very averse. A little perseverance, however, soon brought sufficient relief to encourage her to make a further trial. The irritable state of the mucous membrane of the bowels disappeared; her health improved, and encouraged her to venture upon an amount of exercise which, as the result proved, was not justifiable. She again returned to the prone couch, again transgressed, and at last, having determined to devote herself wholly to the task of getting well, her utmost wishes and hopes were crowned by the occurrence of pregnancy. I have heard indirectly of her since, and have every reason to suppose that the displacement has not returned.

I fear, Sir, that your readers will accuse me of having over-illustrated this subject of retroversion of the uterus, whether as a cause of ill health or of

sterility; but its importance, its frequency, and, to my mind at least, its interesting features, must be my excuse for having thus prolonged it. In the unimpregnated state it causes a great variety of sufferings, which seriously derange and impair the general health. I should say that the pain at the lower part of the sacrum, produced by the pressure of the fundus upon the rectum, is one of the earliest and most invariably observed symptoms, and one which (without examination) I hold to be the most diagnostic, although every now and then cases occur which are exceptions to it. This pain is usually increased by standing, and then sometimes amounts to severe bearing down, so as almost to resemble the symptoms of partial prolapsus; but the pain is chiefly, if not wholly, at the lower part of sacrum, and is usually much aggravated by the passage of solid fæces, which are sometimes much flattened by the pressure of the fundus uteri.

Retroversion in the virgin state is usually gradual in its advance. The uterus sinks more and more under the pressure of the loaded intestines, which are occasionally thrust down upon it with great force by the action of the abdominal muscles in lifting heavy weights, sneezing, &c. The broad and round ligaments are now put more tightly upon the stretch, and a painful dragging is produced at the groins and sides of the pelvis, more especially the left. The ovaries (most usually the left) become displaced, their returning circulation much impeded, dysmenorrhœa with exudations and menorrhagia follow, the one resulting from the congested state of the ovary, the other from a similar condition of the uterus. The os uteri is either turned forwards, and presses against the neck of the bladder, producing much irritability and pain in that direction, or it remains in the natural position: viz., turned downwards, the whole being rather nearer the symphisis pubis than usual; this is the state which may (if necessary) be distinguished by the name of "Retroflection," for the uterus is bent upon the cervix like the bulb of a retort upon its neck: indeed, the resemblance is so correct, both as to form and name, that we might very appropriately have used the substantive and adjective "retorsion" and "retorted," for this peculiar condition. It is in this state of retorted or retroflected uterus that the os is most disposed to ulceration; on account of the great congestion to which these parts are exposed under such circumstances. As, however, a practitioner would never think of trying to heal the ulcerations on a prolapsed uterus, until he had returned it, (when they usually heal spontaneously) so ought we to bear in mind the utter uselessness of applying caustic to the mouth of a uterus which is retroverted, knowing that by replacing the organ we shall remove the congestion which has given rise to it. I have ventured to repeat ths short summary of symptoms, as one can frequently, by their aid alone, infer with tolerable certainty that retroverson is present; a point which, I need hardly say, with young unmarried females is of considerable importance.

TYPHUS FEVER, TYPHOID FEVER, RELAPSING FEVER, AND FEBRICULA,

THE DISEASES COMMONLY CONFOUNDED UNDER THE TERM

CONTINUED FEVER.

ILLUSTRATED BY CASES COLLECTED AT THE BED-SIDE.

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(Continued from Vol. XX., page 458.)

In my last paper, I considered the influence which age exerts on the symptoms and termination of typhus fever. In the present, I shall detail a few cases to illustrate the modifications induced in the disease, when particular organs become the seat of special lesions, and also to exhibit the effects of pregnancy on the mortality of the disease.

CONVULSIONS, &c.

Case 9.—No history—mulberry rash—mental confusion — deafness—delirium — brown tongue—absence of abdominal signs—quick pulse—somnolence—convulsions—coma—death on the fifth day of stay in the hospital. *Eight hours after death.*—Continuance of spots noted during life—clots in the cavity of the arachnoid—slight congestion of the posterior part of the lungs—hæmorrhage into the pulmonary substance—congestion of the posterior wall of the urinary bladder—slight enlargement and softening of the spleen—old disease of the kidneys and of the mitral valve of the heart—other organs healthy.

Mary H., aged 60. 'A rather small-made, thin woman, of whose past condition no particulars could be obtained, was admitted into the London Fever Hospital, under the care of Dr. Tweedie, Sept. 9th, 1847.

On Sept. 10th, the following was her condition:—Her memory was very much impaired; her mind so confused, that, although she thought she was in the hospital, she felt by no means certain; she was slightly deaf; her conjunctivæ were abnormally injected; her pupils were natural; the cheeks were covered with a dingy red flush, not circumscribed; she was unable to leave her bed without assistance; the lips and teeth were covered with sordes; the tongue was dry and brown; there was neither fulness, tenderness, nor gurgling of the abdomen; the bowels acted regularly; the pulse was 100 and full; the heart's impulse strong; the cardiac dulness rather too extensive; a rough murmur was audible with the first sound at the apex; she suffered from a little cough; and some sonorous and sibilous râles were heard over the whole chest; the skin was hot, dry, and spotted; the spots were numerous, of a purplish red colour, varied from one-eighth to one-sixth of an inch in diameter; some of the spots were rendered paler by pressure, some were unchanged by the firmest pressure; these spots were more numerous and darker on the posterior than on the anterior surface of the truuk; here and there, several spots appeared to have coalesced, and so to have formed large irregular purple patches, unaffected by pressure; there were no sudamina on the surface.

She passed a very restless night, *i. e.*, between the 10th and 11th; slept but little, and was occasionally delirious; about two a.m., she was suddenly seized with general convulsions; she appeared to the nurse insensible during the time the attack lasted,—*i, e.*, about ten minutes; there was no frothing at the mouth; her bowels acted once; the pulse rose to 120; the stool and urine were passed into the close stool.

On the following day there was some somnolence, interrupted by delirium, and increased deafness; the skin was cool; the prostration was more decided; all the muscular movements were very tremulous; the stools and urine were passed into bed. There was little change till the night of the 13th, when her speech became unintelligible, and she was again seized with general convulsions, followed by coma. She was lying comatose at the time of the visit, on the fourteenth day of disease, and died that night. On the 10th, 6 oz. of wine were ordered to be administered daily, and, on the following day, the quantity was increased to 8 oz.

The body was examined *eight hours after death.* The weather cool. The cadaveric rigidity was well-marked; the trunk was yet warm; the extremities were cold. Of the spots marked before death as fading, a mere trace of a palish red colour remained; the colour of *these* spots was limited to the surface of the cutis. The spots marked during life as unaffected by pressure, retained the dark purple hue they possessed before death. On section, the colour of *the latter* was found to extend through the whole substance of the cutis, and even slightly, under the darkest spots, into the substance of the subcutaneous cellular tissue. The tint was even deeper beneath the cuticle than on the surface. *Examined with a strong lens, the discoloration appeared to be due to dyeing of the tissues; a few minute vessels were seen loaded with blood, converging to the spots, but none in the discoloured part itself.*

In the cavity of the arachnoid, on the convex surface of the anterior lobe of the left hemisphere of the cerebrum, was a dark crimson clot, about 1 inch in superficial diameter, thin but firm. Continuous with it was a delicate pale, red, fibrinous film, spreading over a large portion of the superior part of the same hemisphere; a second smaller dark clot, situated on a line with the upper edge of the left meatus auditorius externus was united to the first-described coagulum, by the delicate fibrinous film; a similar crimson clot was found on the convex surface of the middle lobe of the right hemisphere.

All these coagula could be detached with the greatest facility, without the least injury to the subjacent arachnoid. The vessels of the pia mater were moderately full of fluid blood; not a drop, however, could be pressed into the cavity of the arachnoid; there was no discoverable lesion of the sinuses; there was no blood at the base of the brain; a little reddish serosity escaped on opening the cavity of the arachnoid.

About 1 oz, of colourless serosity was found in the ventricles, and a little at the base of the brain. There was not the slightest abnormal vascularity of the substance of the organ, of the lining membrane of the ventricles, nor of the plexus choroides. The substance itself of the encephalon was firm and healthy in all respects.

The *heart* was somewhat larger than natural; its substance was firm. There was some old disease of the mitral valve. The blood was fluid, with the exception of a few small, soft, black coagula in the venæ cavæ and right auricle and ventricle.

The *larynx* was healthy; the *bronchial tubes* slightly congested.

The *lungs* were slightly congested posteriorly; and in the *anterior* inferior angle of the inferior lobe of the right lung was a nodule of pulmonary apoplexy of some size.

The *liver* was healthy, but congested; the gall-bladder contained about 1 oz. of thick dark green bile.

The *spleen* weighed 7 oz.; it was soft and dark.

The *kidneys* were healthy, but congested; a few hæmorrhagic points were found under the lining membrane of either kidney. The lining membrane of the posterior wall of the urinary bladder was minutely injected, and beneath the mucous membrane were also several hæmorrhagic spots.

The *pancreas*, the *œsophagus*, and the *mesenteric glands* were healthy.

Stomach.—The lining membrane of the stomach was smooth; there were no rugæ, and a mere trace of mammillation; the consistence and thickness of the membrane was normal.

Large and small intestines.—The colour and thickness of the mucous membrane lining the intestinal canal were normal; but it was somewhat softened, especially in the small intestines, where shreds of any length were obtained with difficulty.

The large intestines contained some solid fæces; there was very little air in any part of the canal.

The points especially worthy of attention in this case are the passage of the spots into petechiæ, the persistence of the spots after death, and I wish especially to direct the reader's attention to the condition of the cutis (as observed after death), on which the discoloration causing the spots depended. In addition to the well-marked mulberry rash, in itself diagnostic of the disease, whatever other symptoms are present or absent, the mental confusion, the muddy hue of skin, the dingy flush of the face, the injected conjunctivæ, the absence of headache *after* the commencement of delirium, the prostration—all these conjoined, were sufficient to render the existence of typhus fever highly probable, though certainly in themselves not absolutely diagnostic.

Convulsions are by no means common in typhus fever. When they do occur, the case almost invariably proves fatal. After death, in the case we are here considering, an effusion of blood was found to have taken place into the cavity of the arachnoid. Although it cannot be questioned that this hæmorrhage occurred before death, yet it may be doubted whether it was the cause of the attack of convulsions. The ordinary result of an effusion of blood into the cavity of the arachnoid on the convex surface of the brain is coma. It is not improbable that the convulsions were induced by the action of the generally diseased blood on the nervous centres, and that the intra-cranial hæmorrhage resulted from the impeded return of blood from the brain during the convulsions. The condition of the anterior inferior angle of the right lung rendered this view of the case highly probable.

My experience leads me to regard effusion of blood into the cavity of the arachnoid as by no means of infrequent occurrence in typhus fever. Capillary hæmorrhage is probably favoured as well by the condition of the solids as of the blood itself. In the case before us there were numerous minute spots of ecchymosis beneath the lining membrane of the pelvis, of the kidneys, and urinary bladder. The bile in this case was, as it generally is after death from typhus fever, thick and dark green; the spleen was soft and not very much enlarged;—the age of the patient favoured softening of that organ, while it was unfavourable to enlargement. (See *Edinburgh Monthly Journal* for October 1849.) The fluid state

of the blood, and the smoothness of the mucous membrane of the stomach are both commonly present after death from typhus fever. But softening of the mucous membrane of the intestinal canal is very rarely seen to the same extent as in this particular case. There had been no signs to indicate its existence during life; and it is probable that it was in a great measure cadaveric. Peyer's patches, and the mesenteric glands, it is to be observed, were in all respects in their normal state.

Hæmorrhage sometimes takes place into the substance of muscles where no external violence can have occurred. The rectus abdominalis is a frequent seat of the effusion of blood. The following case illustrates this complication.

Case 10.—No history of early symptoms.

Mary B., aged 70, a thin woman, with grey hair, came under observation on the sixth day of disease. No particulars of the symptoms present before her admission into the London Fever Hospital, under the care of Dr. Tweedie, July 21st, 1848, could be obtained. She had resided for some years preceding her admission in Kensington workhouse. Several cases of fever, with mulberry rash, were admitted shortly before from the same locality.

When first seen, on the sixth day of disease, her mind was wandering. She fancied she had been in the hospital three days. There was no headache, she had slept a little. She was deaf. The tongue was dry and brown; the bowels slightly relaxed. There were, however, no abdominal signs; the pulse was only 80. There was slight want of resonance, and very feeble respiratory murmurs over the most depending part of the lungs, the patient lying on her back; the skin was warm and dry. Mulberry rash was well marked. The prostration was so great, that the patient was unable even to turn in bed unassisted. 4 oz. of gin were ordered to be given during the twenty-four hours in divided doses. On the next day the pulse had risen to 120; it was very weak; there was some somnolence; in other respects there was little change; she died at 7. a.m., on the ninth day of disease, apparently from asthenia.

The body was examined *thirty-one hours after death*; the weather being cool; the cadaveric rigidity had almost entirely disappeared; the spots observed during life continued; beneath and extending among the fibres of the left rectus abdominalis muscle was a loosely coagulated dark bloody clot, 2 in. in length, and 1 in. in breadth. It was situated, as above described, midway between the umbilicus and pubis.

The *heart* was flabby; the clots contained in it soft and dark; the lining membrane was stained dusky red; the lungs were deeply congested posteriorly; the mucous membrane of the stomach was smooth and free from rugæ; the consistence, thickness, and colour of the whole gastro-intestinal mucous membrane was normal; Peyer's patches in all particulars healthy; larynx, pharynx, and œsophagus healthy; there was no enlargement of the mesenteric glands. A few small cysts studded the cortical substance of the kidneys; the urinary bladder and uterus were normal in all particulars; the pancreas healthy; the liver very flabby and soft; the spleen somewhat enlarged.

Head.—The pia mater was congested; there was a little subarachnoid effusion of serosity; and the pia mater and arachnoid separated from the cerebral convolutions with abnormal facility. The substance of the encephalon itself appeared healthy in all respects.

This patient, like all affected with typhus fever when they make any mistake as to the duration of time, supposed it lengthened; thus she thought three days had elapsed between her entrance into the hospital and my first seeing her, whereas, really, it was only one day. In addition to the presence of a clot in the substance of the rectus abdominalis muscle, this case illustrates the early period at which death from typhus fever, uncomplicated with local lesion, may ensue. There was nothing found after death to account for the fatal termination. Some congestion of the most depending part of the lung—slight congestion of the pia mater—trifling enlargement of the spleen—and a small quantity of loosely coagulated blood in the substance of a muscle, were all the physical changes established during life which the scalpel enabled us to lay bare. The effect on the solids of the general disease, which latter itself our scalpel could not detect, was manifested by the flabby state of the heart and liver, the early disappearance of the cadaveric rigidity, &c.

In Case 9 an example was afforded of convulsions coincident with an effusion of blood into the cavity of the arachnoid. I shall now detail a case in which that lesion was detected after death, when there had been no symptoms to indicate its presence during life, Case 11; and then I shall narrate a case, No. 13, in which convulsions occurred, but which presented no lesion, excepting some congestion of the brain and its membranes, to account for so serious a symptom; and then Case 14, in which the cerebral spmptoms were very prominent during life, but in which, after death, not the slightest deviation from the normal condition of the encephalon or its membranes could be discovered.

Case 11.—After exposure to the contagion of fever accompanied with mulberry rash.

Ensued—rigors frequently repeated—pain in head and limbs—confined bowels—rapid prostration—hoarseness — deafness — disturbed vision — mental confusion—dry brown tongue—difficult deglutition—quick pulse—cool skin—mulberry rash—extreme difficulty of breathing—death on the 16th day.

Eleven hours after death, persistence of spots—clot in the substance of left rectus abdominalis muscle—clot in the cavity of arachnoid—slight congestion of the posterior part of lungs—softening of the mucous membrane of pharynx—thickening of rima glottidis—pus in larynx—other organs normal.

Mary G., aged 49, a moderately stout woman, subject to constant cough, was admitted into the London Fever Hospital, May 9th, 1848, under the care of Dr. Tweedie. Her daughter left the hospital three weeks before, and Mary G. washed her clothes. She was a native of London.

Present illness began 13 days before her admission with rigors frequently repeated—pains in the head and limbs, and confined bowels. She took to her bed entirely on the second day of disease, because she felt generally ill and extreme weakness. There had been no epistaxis. She had taken before admission several doses of aperient medicine. Hoarseness first made its appearance, her relations stated, on the 9th day of disease.

The following notes of her case were taken on the thirteenth day of disease:—No headache, slight deafness (not deaf till present illness), no delirium, memory defective; complains of seeing strange objects about the wards; she is quite conscious that these objects have no real existence; says she has a most disagreeable taste, and a constant sense of unpleasant odours; there is no flush of the face; she is unable to leave her bed without considerable assistance.

The tongue is brown and dry; she swallows either solids or liquids with considerable difficulty; there is swelling and dusky redness of the tonsils, uvula, and velum pendulum palati; she has passed two stools during the last twenty-four hours; there is neither pain, tenderness, fulness, resonance, nor gurgling of the abdomen; no appetite, no thirst.

She can speak only in a faint, hoarse whisper; no tenderness of the larynx; cough troublesome; some sonorous and mucous râles over both sides of the chest; percussion normal; pulse 120, weak; heart sounds normal; skin cool, covered with mulberry rash; vin. alb. ʒiv., jus. bov. On the fourteenth and fifteenth days there was little change in the local or general symptoms, excepting that the spots were paler somewhat on the fourteenth day, and she was quite unable to protrude her tongue, she passed her stools in bed on the fifteenth day. The muscular movements at the same time were extremely tremulous; the pulse had risen at the latter date to 128, was very weak, and the skin cool. She became very restless during the afternoon of the fifteenth day. Death occurred at 4 a.m., on the sixteenth day. For some hours before the fatal termination the breathing was exceedingly laboured. There were no convulsions, and no coma.

A blister was applied to the throat on the fourteenth day of disease, and at the same time the wine was increased to six ounces in the twenty-four hours. On the fifteenth day four ounces of gin were given, in addition to the wine.

Eleven hours after death the following appearances were observed:—The spots noted during life were still to be detected; there was no emaciation; at least 1½ inches of fat covered the abdominal parietes. Between the left rectus abdominalis muscle and its sheath, anteriorly and posteriorly, and also among the fibres of the muscle, which were at that place softer than elsewhere, was a considerable quantity of loosely coagulated blood. The extent occupied by the clot was about six inches by two inches. It commenced an inch above the pubis.

Head.—The bloody points on the external surface of the dura mater were very numerous. A little bloody serosity escaped on opening the cavity of the arachnoid. On either side, extending from the greater wing of the spheroid bone to the tentorium cerebelli, closely applied to the arachnoid covering the pia mater, and within the cavity of the arachnoid, was a film of coagulated blood of a bright red colour, with spots of a dark venous hue scattered over it at intervals. The difference in colour depended on the difference in the thickness of the clot. There was no trace of any clot in the longitudinal fissure, and no coagulum at the base of the brain. In the meshes of the pia mater was much colourless serosity; and a moderate amount of the same in the lateral ventricles. The bloody points on the cut surface of the cerebrum appeared more numerous than natural. There was increased vascularity of the plexus choroides. The consistence of the cerebral substance was natural.

There was no abnormal congestion of the *pulmonary tissue*. The lining membrane of the bronchial tubes was finely injected; the tubes themselves contained much muco-purulent fluid. The *pericardium* and *heart* were healthy. The clots in the heart were firm.

The mucous membrane of the *pharynx* was of a dirty yellow colour, and so soft that it could be readily removed by the slightest scraping from the subjacent tissue.

Larynx.—The rima glottidis was narrow, the mucous membrane of the whole larynx finely injected, and covered with a layer of purulent fluid. On and above the chordæ vocales was some solid opaque white matter, resembling lymph in physical character.

The *liver* was flabby; the *spleen* small, weighing only 4½ oz., was soft and flabby.

The *pancreas*, *urinary bladder*, and *uterus* were healthy. The *kidneys* contained numerous small cysts in their cortical substance.

The *œsophagus* was normal in appearance.

Stomach.—The whole of the coats of the great cul de sac were so soft that the finger passed through them with the greatest facility. Bluish white bands, from which the mucous membrane had disappeared, extend from the softened portion towards the pylorus. The whole mucous membrane of the stomach was exceedingly soft, but very pale.

Large and small intestines.—The thickness, colour, and consistence of the mucous membrane lining the intestinal canal, as well as the condition of Peyer's patches, were carefully noted. They were healthy in all particulars. The mesenteric glands were in their normal condition.

In this case there was much more blood within the cavity of the arachnoid than in Case 10, and yet there were no convulsions. The softened condition of the substance of the rectus abdominalis, and the presence of a clot of blood in it, are points worthy of attention, as showing the relation between the diseased condition of the solids and fluids generally, and the presence of hæmorrhage into the cavity of the arachnoid. Clots were found on both cerebral hemispheres. The absence of any trace of clot in the longitudinal fissure rendered it probable that the hæmorrhage occurred primarily on the two sides, *i. e.*, that the blood did not pass before coagulation from the one hemisphere to the other. As is common in cases of hæmorrhage into the arachnoidian, no trace of the vessels from which the blood escaped could be detected.

A small quantity of coagulated blood is, as I have before remarked, by no means infrequently found within the cavity of the arachnoid after death from typhus fever. Thus this lesion was discovered to exist in one-seventh of the cases of typhus fever which proved fatal during the progress of that disease analysed by myself in the *Edinburgh Monthly Journal* for October 1849, and my impression is, that such proportion does not very far exceed what the whole of the cases I have examined after death would afford. The quantity of blood, however, I ought to remark, is often very small. I have never seen the slightest trace of hæmorrhage into the *substance of the brain* after typhus fever. Now, intense congestion of the membranes of the brain is frequently, almost constantly, found after death from typhus fever. Congestion of the cerebral substance much more rarely; and when it does occur is infinitely less intense.

This case also illustrates one form of laryngitis, as found in typhus fever, *i. e.*, that form which advances insidiously, and is unattended with those violent symptoms which are consequent on sudden swelling of the submucous tissue of the larynx. The physical obstruction to the entrance of the air was

comparatively trifling. It will be observed, that from the history of the symptoms, as well as from the more advanced stage of the disease of the pharyngeal than of the laryngeal mucous membrane, that the affection commenced, as it usually does, in the pharynx, and then spread down to the larynx. Deafness was noted in this case, as it was in Cases 3, 11, and 12. It is a common symptom in typhus fever. The softening of the stomach was cadaveric, a part of that tendency to softening of the tissues so eminently characteristic of the disease I am here considering. The sonorous râle, and the condition of the bronchial mucous membrane, were probably dependent on the chronic bronchitis, of which it appeared this woman had long been the subject.

Case 13.—Slight rigors, pains in back and abdomen—diarrhœa without medicine—sudden prostration—mental confusion—trifling headache, vertigo—brown and dry tongue—tenderness of abdomen—mulberry rash—convulsions—coma—*death*—persistence of spots—meningeal and cerebral congestion—blood very loosely coagulated—hypertrophy of the heart—other organs healthy.

Thomas B., aged 61, a printer, a thin man, whose previous health had been very good, was received into the London Fever Hospital, May 27th, 1848, on the 8th day of disease, under the care of Dr. Tweedie. He never had a fit of any kind before his admission into the hospital. His illness commenced with slight rigors and pain in the back and abdomen. His bowels were relaxed from the outset and before he took medicine of any kind. He kept his bed on the second day of illness.

On the 9th day of disease the following notes of his case were made:—

He states, when asked, that he has slight headache and some vertigo—he slept but little last night—his mind is somewhat confused. The tongue is dry and brown—the abdomen tender—the bowels much relaxed. He has passed five stools since his admission yesterday—there is no appetite and but little thirst.

The pulse is only 90. With the exception of rather extensive cardiac dulness, there are no abnormal physical chest signs.

The muscular powers are greatly impaired—he is quite unable to leave his bed unassisted, even to reach the closestool. The skin is warm and dry. There is abundant mulberry rash.

During the night he was seized with convulsions, throwing his arms about violently; he appeared at the time unconscious of all going on around him. This fit lasted for about ten minutes. He slept for some time before and after the fit.

When I saw him again on the following morning, *i. e.*, the 10th day of disease, he said he was free from headache—his mind was rather more confused than on the 9th day—the conjunctiva was injected, the pupils small—the urine was passed into the bed. On the following day he had a second attack of convulsions, which lasted, however, but a very few minutes. During this attack his limbs became very rigid and he foamed at the mouth, and after it he slept for half an hour. He was otherwise very wakeful and occasionally delirious. On the 11th day he continued watchful and delirious—there were frequent twitchings of the muscles of the face—the urine and the stools were passed into bed—the pulse was scarcely perceptible. He died at 11 a.m., on the 12th day of disease. He was comatose for some hours before death.

The body was examined twenty-seven hours after death.—The spots marked during life continued visible.

Head.—The dura mater was considerably congested. There was a little fluid in the cavity of the arachnoid, and a small quantity infiltrated the meshes of the pia mater. The arachnoid was rather opaque. The pia mater minutely injected over the whole surface of the brain. Numerous but minute bloody points studded the cut surface of the grey and white matter of the cerebrum. The consistence of the brain was natural. The lateral ventricles were moderately distended with colourless fluid. The vessels of the plexus choroides were loaded with blood.

Chest.—With the exception of a very small soft black clot in the right auricle and ventricle, and a still smaller clot in the left auricle and ventricle, the blood was fluid throughout the body.

Pericardium healthy.

Heart somewhat enlarged and hypertrophied.

Larynx—bronchial tubes—bronchial glands and *lungs* healthy in appearance.

Pharynx and œsophagus normal.

Stomach.—With the exception of a few rugæ, along the greater curvature, and trifling mammillation near the pylorus, the mucous membrane of the stomach was smooth; the mucous membrane was posteriorly of reddish colour, anteriorly a darker red, and along the greater curvature of a vermillion hue; the redness was punctiform and capillary; the deeper red parts were slightly thickened and firmer than the surrounding; there was no softening of any part of the lining membrane; the larger vessels of the posterior wall of the organ were moderately full of blood; none were visible on the anterior surface of the organ.

The *mesenteric glands* and *intestines* were healthy in colour, thickness, and consistence.

The *pancreas, liver, kidneys, and urinary bladder*, were normal; the *gall bladder* contained some dark green bile; the *spleen* was dark and firm, and weighed 7½ oz.

Thus, with the exception of the congestion of the brain, by no means greater than in many cases when no convulsions occurred, there was no lesion to account for that symptom. The patient died at an early period of the disease, *i. e.* on the 12th day, and no local complication of importance was revealed by the scalpel. The convulsions and death were probably the result of the same cause, the diseased condition of the blood. I would wish particularly to direct the reader's attention to the fact, that diarrhœa, pain ain the abdomen, and tenderness of the belly, were among the earliest and most prominent symptoms, and yet there was no lesion of Peyer's patches, The tenderness, probably, depended on the condition of the gastric mucous membrane. I shall have, hereafter, to detail cases, in which constipation was a prominent symptom, and yet extensive ulceration of the agminated glands was detected after death. So that, *by themselves*, pain in the abdomen and diarrhœa, even when present in fever, are by no means *diagnostic* of lesion of Peyer's patches.

Case 14.—George C., aged 58, a stout, fair-complexioned man, was admitted into the London Fever Hospital, under the care of Dr. Tweedie, July 4th, 1848, labouring under typhus fever, accompanied with the diagnostic mulberry-rash. This man's wife and children were patients in the hospital some weeks before; they, too, laboured under typhus fever with mulberry rash. From his admission till about the fourteenth day of disease, when the following notes of his condition were taken, he was *violently* delirious:—"He sleeps very much—when roused is very delirious; he cannot be made to take his medicine; will not protrude his tongue; is unable to leave his bed unassisted; he has passed two stools during the last twenty-four hours; his pulse, which, up to this date, has not exceeded 96, is 108, and for the first time irregular; on the following day it reached 120 in the minute; it continued irregular, and, during the last twenty-four hours of life, was intermitting. On the fifteenth day, strabismus was observed for the first time; his eyes were both drawn upwards and inwards; his wife was struck by his appearance, and remarked spontaneously, that she had never seen him squint before his present illness; the spots grew darker as the disease advanced; coma preceded death for many hours; he died on about the eighteenth day of disease."

The following was the condition of the organs discovered, on an examination of the body twenty-four hours after death:—

There was no opacity of the arachnoid; a little fluid only in the cavity of that membrane; a little colourless serosity in the meshes of the pia mater; slight congestion of the latter; the arachnoid and pia mater separate in one mass from the surface of the convolutions, without carrying away any of the cerebral substance; a little transparent serosity in the ventricles; there were a few more red points than common in the white substance of the brain; the consistence of that organ was perfectly normal.

With the exception of some red serosity in the pericardium, which microscopic examination proved to contain no blood corpuscles,—a very flabby condition of the heart, the lining membrane of which was stained dusky red,—a nearly fluid condition of the blood throughout the body,—a limited amount of consolidation of the pulmonary tissue of the left lung from central pneumonia,—flabby liver,—dark thick bile,—and smoothness of the lining membrane of the stomach,—common after death from typhus fever, as I have before pointed out, the whole of the organs were in a normal state.

I have narrated the above scanty particulars of this case, in order that the reader may have another illustration of the frequent presence of what are called head-symptoms,—violent delirium, squinting, and coma,—and yet after death-examination be unable to afford the slightest explanation of the morbid vital phenomena, by the demonstration of any change of structure within the cranium. An irregular or intermitting pulse is by no means rare in typhus fever, when no old disease of that organ is detected after death.

I do not give a case illustrative of the pathological appearances observed within the cranium after death from typhus fever, complicated with inflammation of the brain or its membrane, for this reason, because *I have never made an examination, after death, of a case of typhus fever, in which such appearances were present.* The assertion that the symptoms of typhus fever are due to inflammation of the brain, rests on as untenable grounds as that of the same disease in gastro-enteritis.

COMA VIGIL.

Case 15.—Maria W., aged 52, was first seen on the ninth day of disease; at that time the symptoms of typhus fever were present. She slept much, and on the tenth day almost constantly, night and day. Somnolence continued till about the middle of the thirteenth day, gradually, however, becoming less constant. From the time of the visit, on the thirteenth day, till her death, at 1 a.m. on the fifteenth day, she never closed her eyes. On the fourteenth day, the following note was made:—She lies constantly on her back; eyes open; has not closed them since the visit yesterday; cannot be made to open her mouth, or to attempt to protrude her tongue; gives no sign of consciousness when spoken to. The skin is cool and sweating profusely; the spots are darker than on admission; there are no sudamina.

The body was examined twenty-two hours after death. There was some colourless serosity in the cavity of the arachnoid; a little similar fluid in the meshes of the pia mater; a moderate quantity in the ventricles. The pia mater, arachnoid, and cerebral substance, appeared healthy in colour and consistence.

Thus, no condition of the encephalon was detected, to account for the peculiar symptom above described.

I have seen one person only recover from this state, and in that case the coma vigil was not complete.

Case 16.—George P., aged 30, a surgeon, was received into the London Fever Hospital, June 2nd, 1849, on the eighth day of disease, under the care of Dr. Tweedie. He had well-marked and very severe typhus fever. At the time of his admission the mulberry rash was very abundant. On the sixteenth day the following note was made:—

"He has been since last evening in his present condition. Is now lying on his back, his eyes open, but he is apparently unconscious of all going on around him. He cannot be made to protrude his tongue, or even to make any effort to do so; yet he swallows a little fluid when poured into his mouth. His pupil acts very little by the aid of a candle. Pulse 132, very weak. Urinary bladder distended; urine passing into the bed. The mulberry rash is well marked. A blister was applied to his forehead, and on the following day the pulse had fallen to 108. He had some sleep; assisted himself to drink; protruded his tongue fully when bidden; and the spots were much paler. From this time he rapidly recovered."

It will be observed, that the condition described as having existed in the two last described cases was very different from somnolence or ordinary coma. It was the opposite of that described as coma vigil by Chomel and some other writers, *i. e.*, a condition in which the patient sleeps as much, or even more than in health, and yet declares that he has never closed his eyes.

PREGNANCY is by no means a necessarily fatal complication of typhus fever; nor do pregnant women necessarily miscarry, as the two following cases, 17 and 18, prove.

Case 17.—Mary Ann G., aged 23, a stout, well-made, married woman, was received into the London Fever Hospital, August 18, 1847, on the ninth day of disease, under the care of Dr. Tweedie. Her brother also suffering from typhus fever, was admitted with her. This woman was between seven and eight months gone with child. She had well-marked severe typhus fever. The mulberry rash was copious and characteristic. Her pulse on the tenth day of disease was 140, and on the twelfth day 150; the tongue dry and brown, and the spots dark. On the fifteenth day of disease the pulse had fallen to 100; the tongue was moist, and the spots were fading. Vomiting

of the blood, and the smoothness of the mucous membrane of the stomach are both commonly present after death from typhus fever. But softening of the mucous membrane of the intestinal canal is very rarely seen to the same extent as in this particular case. There had been no signs to indicate its existence during life; and it is probable that it was in a great measure cadaveric. Peyer's patches, and the mesenteric glands, it is to be observed, were in all respects in their normal state.

Hæmorrhage sometimes takes place into the substance of muscles where no external violence can have occurred. The rectus abdominalis is a frequent seat of the effusion of blood. The following case illustrates this complication.

Case 10.—No history of early symptoms.

Mary B., aged 70, a thin woman, with grey hair, came under observation on the sixth day of disease. No particulars of the symptoms present before her admission into the London Fever Hospital, under the care of Dr. Tweedie, July 21st, 1848, could be obtained. She had resided for some years preceding her admission in Kensington workhouse. Several cases of fever, with mulberry rash, were admitted shortly before from the same locality.

When first seen, on the sixth day of disease, her mind was wandering. She fancied she had been in the hospital three days. There was no headache, she had slept a little. She was deaf. The tongue was dry and brown; the bowels slightly relaxed. There were, however, no abdominal signs; the pulse was only 80. There was slight want of resonance, and very feeble respiratory murmurs over the most depending part of the lungs, the patient lying on her back; the skin was warm and dry. Mulberry rash was well marked. The prostration was so great, that the patient was unable even to turn in bed unassisted. 4 oz. of gin were ordered to be given during the twenty-four hours in divided doses. On the next day the pulse had risen to 120; it was very weak; there was some somnolence; in other respects there was little change; she died at 7. a.m., on the ninth day of disease, apparently from asthenia.

The body was examined *thirty-one hours after death*; the weather being cool; the cadaveric rigidity had almost entirely disappeared; the spots observed during life continued; beneath and extending among the fibres of the left rectus abdominalis muscle was a loosely coagulated dark bloody clot, 2 in. in length, and 1 in. in breadth. It was situated, as above described, midway between the umbilicus and pubis.

The *heart* was flabby; the clots contained in it soft and dark; the lining membrane was stained dusky red; the lungs were deeply congested posteriorly; the mucous membrane of the stomach was smooth and free from rugæ; the consistence, thickness, and colour of the whole gastro-intestinal mucous membrane was normal; Peyer's patches in all particulars healthy; larynx, pharynx, and œsophagus healthy; there was no enlargement of the mesenteric glands. A few small cysts studded the cortical substance of the kidneys; the urinary bladder and uterus were normal in all particulars; the pancreas healthy; the liver very flabby and soft; the spleen somewhat enlarged.

Head.—The pia mater was congested; there was a little subarachnoid effusion of serosity; and the pia mater and arachnoid separated from the cerebral convolutions with abnormal facility. The substance of the encephalon itself appeared healthy in all respects.

This patient, like all affected with typhus fever when they make any mistake as to the duration of time, supposed it lengthened; thus she thought three days had elapsed between her entrance into the hospital and my first seeing her, whereas, really, it was only one day. In addition to the presence of a clot in the substance of the rectus abdominalis muscle, this case illustrates the early period at which death from typhus fever, uncomplicated with local lesion, may ensue. There was nothing found after death to account for the fatal termination. Some congestion of the most depending part of the lung—slight congestion of the pia mater—trifling enlargement of the spleen—and a small quantity of loosely coagulated blood in the substance of a muscle, were all the physical changes established during life which the scalpel enabled us to lay bare. The effect on the solids of the general disease, which latter itself our scalpel could not detect, was manifested by the flabby state of the heart and liver, the early disappearance of the cadaveric rigidity, &c.

In Case 9 an example was afforded of convulsions coincident with an effusion of blood into the cavity of the arachnoid. I shall now detail a case in which that lesion was detected after death, when there had been no symptoms to indicate its presence during life, Case 11; and then I shall narrate a case, No. 13, in which convulsions occurred, but which presented no lesion, excepting some congestion of the brain and its membranes, to account for so serious a symptom; and then Case 14, in which the cerebral spmptoms were very prominent during life, but in which, after death, not the slightest deviation from the normal condition of the encephalon or its membranes could be discovered.

Case 11.—After exposure to the contagion of fever accompanied with mulberry rash.

Ensued—rigors frequently repeated—pain in head and limbs—confined bowels—rapid prostration—hoarseness — deafness — disturbed vision — mental confusion—dry brown tongue—difficult deglutition—quick pulse—cool skin—mulberry rash—extreme difficulty of breathing—death on the 16th day.

Eleven hours after death, persistence of spots—clot in the substance of left rectus abdominalis muscle—clot in the cavity of arachnoid—slight congestion of the posterior part of lungs—softening of the mucous membrane of pharynx—thickening of rima glottidis—pus in larynx—other organs normal.

Mary G., aged 49, a moderately stout woman, subject to constant cough, was admitted into the London Fever Hospital, May 9th, 1848, under the care of Dr. Tweedie. Her daughter left the hospital three weeks before, and Mary G. washed her clothes. She was a native of London.

Present illness began 13 days before her admission with rigors frequently repeated—pains in the head and limbs, and confined bowels. She took to her bed entirely on the second day of disease, because she felt generally ill and extreme weakness. There had been no epistaxis. She had taken before admission several doses of aperient medicine. Hoarseness first made its appearance, her relations stated, on the 9th day of disease.

The following notes of her case were taken on the thirteenth day of disease:—No headache, slight deafness (not deaf till present illness), no delirium, memory defective; complains of seeing strange objects about the wards; she is quite conscious that these objects have no real existence; says she has a most disagreeable taste, and a constant sense of unpleasant odours; there is no flush of the face; she is unable to leave her bed without considerable assistance.

The tongue is brown and dry; she swallows either solids or liquids with considerable difficulty; there is swelling and dusky redness of the tonsils, uvula, and velum pendulum palati; she has passed two stools during the last twenty-four hours; there is neither pain, tenderness, fulness, resonance, nor gurgling of the abdomen; no appetite, no thirst.

She can speak only in a faint, hoarse whisper; no tenderness of the larynx; cough troublesome; some sonorous and mucous râles over both sides of the chest; percussion normal; pulse 120, weak; heart sounds normal; skin cool, covered with mulberry rash; vin. alb. ʒiv., jus. bov. On the fourteenth and fifteenth days there was little change in the local or general symptoms, excepting that the spots were paler somewhat on the fourteenth day, and she was quite unable to protrude her tongue, she passed her stools in bed on the fifteenth day. The muscular movements at the same time were extremely tremulous; the pulse had risen at the latter date to 128, was very weak, and the skin cool. She became very restless during the afternoon of the fifteenth day. Death occurred at 4 a.m., on the sixteenth day. For some hours before the fatal termination the breathing was exceedingly laboured. There were no convulsions, and no coma.

A blister was applied to the throat on the fourteenth day of disease, and at the same time the wine was increased to six ounces in the twenty-four hours. On the fifteenth day four ounces of gin were given, in addition to the wine.

Eleven hours after death the following appearances were observed:—The spots noted during life were still to be detected; there was no emaciation; at least 1½ inches of fat covered the abdominal parietes. Between the left rectus abdominalis muscle and its sheath, anteriorly and posteriorly, and also among the fibres of the muscle, which were at that place softer than elsewhere, was a considerable quantity of loosely coagulated blood. The extent occupied by the clot was about six inches by two inches. It commenced an inch above the pubis.

Head.—The bloody points on the external surface of the dura mater were very numerous. A little bloody serosity escaped on opening the cavity of the arachnoid. On either side, extending from the greater wing of the spheroid bone to the tentorium cerebelli, closely applied to the arachnoid covering the pia mater, and within the cavity of the arachnoid, was a film of coagulated blood of a bright red colour, with spots of a dark venous hue scattered over it at intervals. The difference in colour depended on the difference in the thickness of the clot. There was no trace of any clot in the longitudinal fissure, and no coagulum at the base of the brain. In the meshes of the pia mater was much colourless serosity; and a moderate amount of the same in the lateral ventricles. The bloody points on the cut surface of the cerebrum appeared more numerous than natural. There was increased vascularity of the plexus choroides. The consistence of the cerebral substance was natural.

There was no abnormal congestion of the *pulmonary tissue*. The lining membrane of the bronchial tubes was finely injected; the tubes themselves contained much muco-purulent fluid. The *pericardium* and *heart* were healthy. The clots in the heart were firm.

The mucous membrane of the *pharynx* was of a dirty yellow colour, and so soft that it could be readily removed by the slightest scraping from the subjacent tissue.

Larynx.—The rima glottidis was narrow, the mucous membrane of the whole larynx finely injected, and covered with a layer of purulent fluid. On and above the chordæ vocales was some solid opaque white matter, resembling lymph in physical character.

The *liver* was flabby; the *spleen* small, weighing only 4½ oz., was soft and flabby.

The *pancreas*, *urinary bladder*, and *uterus* were healthy. The *kidneys* contained numerous small cysts in their cortical substance.

The *œsophagus* was normal in appearance.

Stomach.—The whole of the coats of the great cul de sac were so soft that the finger passed through them with the greatest facility. Bluish white bands, from which the mucous membrane had disappeared, extend from the softened portion towards the pylorus. The whole mucous membrane of the stomach was exceedingly soft, but very pale.

Large and small intestines.—The thickness, colour, and consistence of the mucous membrane lining the intestinal canal, as well as the condition of Peyer's patches, were carefully noted. They were healthy in all particulars. The mesenteric glands were in their normal condition.

In this case there was much more blood within the cavity of the arachnoid than in Case 10, and yet there were no convulsions. The softened condition of the substance of the rectus abdominalis, and the presence of a clot of blood in it, are points worthy of attention, as showing the relation between the diseased condition of the *solids* and fluids generally, and the presence of hæmorrhage into the cavity of the arachnoid. Clots were found on both cerebral hemispheres. The absence of any trace of clot in the longitudinal fissure rendered it probable that the hæmorrhage occurred primarily on the two sides, *i. e.*, that the blood did not pass before coagulation from the one hemisphere to the other. As is common in cases of hæmorrhage into the arachnoidian, no trace of the vessels from which the blood escaped could be detected.

A small quantity of coagulated blood is, as I have before remarked, by no means infrequently found within the cavity of the arachnoid after death from typhus fever. Thus this lesion was discovered to exist in one-seventh of the cases of typhus fever which proved fatal during the progress of that disease analysed by myself in the *Edinburgh Monthly Journal* for October 1849, and my impression is, that such proportion does not very far exceed what the whole of the cases I have examined after death would afford. The quantity of blood, however, I ought to remark, is often very small. I have never seen the slightest trace of hæmorrhage into the *substance of the brain* after typhus fever. Now, intense congestion of the membranes of the brain is frequently, almost constantly, found after death from typhus fever. Congestion of the cerebral substance much more rarely; and when it does occur is infinitely less intense.

This case also illustrates one form of laryngitis, as found in typhus fever, *i. e.*, that form which advances insidiously, and is unattended with those violent symptoms which are consequent on sudden swelling of the submucous tissue of the larynx. The physical obstruction to the entrance of the air was

comparatively trifling. It will be observed, that from the history of the symptoms, as well as from the more advanced stage of the disease of the pharyngeal than of the laryngeal mucous membrane, that the affection commenced, as it usually does, in the pharynx, and then spread down to the larynx. Deafness was noted in this case, as it was in Cases 3, 11, and 12. It is a common symptom in typhus fever. The softening of the stomach was cadaveric, a part of that tendency to softening of the tissues so eminently characteristic of the disease I am here considering. The sonorous râle, and the condition of the bronchial mucous membrane, were probably dependent on the chronic bronchitis, of which it appeared this woman had long been the subject.

Case 13.—Slight rigors, pains in back and abdomen—diarrhœa without medicine—sudden prostration—mental confusion—trifling headache, vertigo—brown and dry tongue—tenderness of abdomen—mulberry rash—convulsions—coma—*death*—persistence of spots—meningeal and cerebral congestion—blood very loosely coagulated—hypertrophy of the heart—other organs healthy.

Thomas B., aged 61, a printer, a thin man, whose previous health had been very good, was received into the London Fever Hospital, May 27th, 1848, on the 8th day of disease, under the care of Dr. Tweedie. He never had a fit of any kind before his admission into the hospital. His illness commenced with slight rigors and pain in the back and abdomen. His bowels were relaxed from the outset and before he took medicine of any kind. He kept his bed on the second day of illness.

On the 9th day of disease the following notes of his case were made:—

He states, when asked, that he has slight headache and some vertigo—he slept but little last night—his mind is somewhat confused. The tongue is dry and brown—the abdomen tender—the bowels much relaxed. He has passed five stools since his admission yesterday—there is no appetite and but little thirst.

The pulse is only 90. With the exception of rather extensive cardiac dulness, there are no abnormal physical chest signs.

The muscular powers are greatly impaired—he is quite unable to leave his bed unassisted, even to reach the closestool. The skin is warm and dry. There is abundant mulberry rash.

During the night he was seized with convulsions, throwing his arms about violently; he appeared at the time unconscious of all going on around him. This fit lasted for about ten minutes. He slept for some time before and after the fit.

When I saw him again on the following morning, *i. e.*, the 10th day of disease, he said he was free from headache—his mind was rather more confused than on the 9th day—the conjunctiva was injected, the pupils small—the urine was passed into the bed. On the following day he had a second attack of convulsions, which lasted, however, but a very few minutes. During this attack his limbs became very rigid and he foamed at the mouth, and after it he slept for half an hour. He was otherwise very wakeful and occasionally delirious. On the 11th day he continued watchful and delirious—there were frequent twitchings of the muscles of the face—the urine and the stools were passed into bed—the pulse was scarcely perceptible. He died at 11 a.m., on the 12th day of disease. He was comatose for some hours before death.

The body was examined twenty-seven hours after death.—The spots marked during life continued visible.

Head.—The dura mater was considerably congested. There was a little fluid in the cavity of the arachnoid, and a small quantity infiltrated the meshes of the pia mater. The arachnoid was rather opaque. The pia mater minutely injected over the whole surface of the brain. Numerous but minute bloody points studded the cut surface of the grey and white matter of the cerebrum. The consistence of the brain was natural. The lateral ventricles were moderately distended with colourless fluid. The vessels of the plexus choroides were loaded with blood.

Chest.—With the exception of a very small soft black clot in the right auricle and ventricle, and a still smaller clot in the left auricle and ventricle, the blood was fluid throughout the body.

Pericardium healthy.

Heart somewhat enlarged and hypertrophied.

Larynx—bronchial tubes—bronchial glands and *lungs* healthy in appearance.

Pharynx and œsophagus normal.

Stomach.—With the exception of a few rugæ, along the greater curvature, and trifling mammillation near the pylorus, the mucous membrane of the stomach was smooth; the mucous membrane was posteriorly of reddish colour, anteriorly a darker red, and along the greater curvature of a vermillion hue; the redness was punctiform and capillary; the deeper red parts were slightly thickened and firmer than the surrounding; there was no softening of any part of the lining membrane; the larger vessels of the posterior wall of the organ were moderately full of blood; none were visible on the anterior surface of the organ.

The *mesenteric glands* and *intestines* were healthy in colour, thickness, and consistence.

The *pancreas, liver, kidneys, and urinary bladder*, were normal; the *gall bladder* contained some dark green bile; the *spleen* was dark and firm, and weighed 7½ oz.

Thus, with the exception of the congestion of the brain, by no means greater than in many cases when no convulsions occurred, there was no lesion to account for that symptom. The patient died at an early period of the disease, *i. e.* on the 12th day, and no local complication of importance was revealed by the scalpel. The convulsions and death were probably the result of the same cause, the diseased condition of the blood. I would wish particularly to direct the reader's attention to the fact, that diarrhœa, pain ain the abdomen, and tenderness of the belly, were among the earliest and most prominent symptoms, and yet there was no lesion of Peyer's patches, The tenderness, probably, depended on the condition of the gastric mucous membrane. I shall have, hereafter, to detail cases, in which constipation was a prominent symptom, and yet extensive ulceration of the agminated glands was detected after death. So that, *by themselves*, pain in the abdomen and diarrhœa, even when present in fever, are by no means *diagnostic* of lesion of Peyer's patches.

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The following was the condition of the organs discovered, on an examination of the body twenty-four hours after death:—

There was no opacity of the arachnoid; a little fluid only in the cavity of that membrane; a little colourless serosity in the meshes of the pia mater; slight congestion of the latter; the arachnoid and pia mater separate in one mass from the surface of the convolutions, without carrying away any of the cerebral substance; a little transparent serosity in the ventricles; there were a few more red points than common in the white substance of the brain; the consistence of that organ was perfectly normal.

With the exception of some red serosity in the pericardium, which microscopic examination proved to contain no blood corpuscles,—a very flabby condition of the heart, the lining membrane of which was stained dusky red,—a nearly fluid condition of the blood throughout the body,—a limited amount of consolidation of the pulmonary tissue of the left lung from central pneumonia,—flabby liver,—dark thick bile,—and smoothness of the lining membrane of the stomach,—common after death from typhus fever, as I have before pointed out, the whole of the organs were in a normal state.

I have narrated the above scanty particulars of this case, in order that the reader may have another illustration of the frequent presence of what are called head-symptoms,—violent delirium, squinting, and coma,—and yet after death-examination be unable to afford the slightest explanation of the morbid vital phenomena, by the demonstration of any change of structure within the cranium. An irregular or intermitting pulse is by no means rare in typhus fever, when no old disease of that organ is detected after death.

I do not give a case illustrative of the pathological appearances observed within the cranium after death from typhus fever, complicated with inflammation of the brain or its membrane, for this reason, because *I have never made an examination, after death, of a case of typhus fever, in which such appearances were present.* The assertion that the symptoms of typhus fever are due to inflammation of the brain, rests on as untenable grounds as that of the same disease in gastro-enteritis.

COMA VIGIL.

Case 15.—Maria W, aged 52, was first seen on the ninth day of disease; at that time the symptoms of typhus fever were present. She slept much, and on the tenth day almost constantly, night and day. Somnolence continued till about the middle of the thirteenth day, gradually, however, becoming less constant. From the time of the visit, on the thirteenth day, till her death, at 1 a.m. on the fifteenth day, she never closed her eyes. On the fourteenth day, the following note was made:—She lies constantly on her back; eyes open; has not closed them since the visit yesterday; cannot be made to open her mouth, or to attempt to protrude her tongue; gives no sign of consciousness when spoken to. The skin is cool and sweating profusely; the spots are darker than on admission; there are no sudamina.

The body was examined twenty-two hours after death. There was some colourless serosity in the cavity of the arachnoid; a little similar fluid in the meshes of the pia mater; a moderate quantity in the ventricles. The pia mater, arachnoid, and cerebral substance, appeared healthy in colour and consistence.

Thus, no condition of the encephalon was detected, to account for the peculiar symptom above described.

I have seen one person only recover from this state, and in that case the coma vigil was not complete.

Case 16.—George P., aged 30, a surgeon, was received into the London Fever Hospital, June 2nd, 1849, on the eighth day of disease, under the care of Dr. Tweedie. He had well-marked and very severe typhus fever. At the time of his admission the mulberry rash was very abundant. On the sixteenth day the following note was made:—

"He has been since last evening in his present condition. Is now lying on his back, his eyes open, but he is apparently unconscious of all going on around him. He cannot be made to protrude his tongue, or even to make any effort to do so; yet he swallows a little fluid when poured into his mouth. His pupil acts very little by the aid of a candle. Pulse 132, very weak. Urinary bladder distended; urine passing into the bed. The mulberry rash is well marked. A blister was applied to his forehead, and on the following day the pulse had fallen to 108. He had some sleep; assisted himself to drink; protruded his tongue fully when bidden; and the spots were much paler. From this time he rapidly recovered."

It will be observed, that the condition described as having existed in the two last described cases was very different from somnolence or ordinary coma. It was the opposite of that described as coma vigil by Chomel and some other writers, *i. e.*, a condition in which the patient sleeps as much, or even more than in health, and yet declares that he has never closed his eyes.

Pregnancy is by no means a necessarily fatal complication of typhus fever; nor do pregnant women necessarily miscarry, as the two following cases, 17 and 18, prove.

Case 17.—Mary Ann G., aged 23, a stout, well-made, married woman, was received into the London Fever Hospital, August 18, 1847, on the ninth day of disease, under the care of Dr. Tweedie. Her brother also suffering from typhus fever, was admitted with her. This woman was between seven and eight months gone with child. She had well-marked severe typhus fever. The mulberry rash was copious and characteristic. Her pulse on the tenth day of disease was 140, and on the twelfth day 150; the tongue dry and brown, and the spots dark. On the fifteenth day of disease the pulse had fallen to 100; the tongue was moist, and the spots were fading. Vomiting

of the blood, and the smoothness of the mucous membrane of the stomach are both commonly present after death from typhus fever. But softening of the mucous membrane of the intestinal canal is very rarely seen to the same extent as in this particular case. There had been no signs to indicate its existence during life; and it is probable that it was in a great measure cadaveric. Peyer's patches, and the mesenteric glands, it is to be observed, were in all respects in their normal state.

Hæmorrhage sometimes takes place into the substance of muscles where no external violence can have occurred. The rectus abdominalis is a frequent seat of the effusion of blood. The following case illustrates this complication.

Case 10.—No history of early symptoms.

Mary B., aged 70, a thin woman, with grey hair, came under observation on the sixth day of disease. No particulars of the symptoms present before her admission into the London Fever Hospital, under the care of Dr. Tweedie, July 21st, 1848, could be obtained. She had resided for some years preceding her admission in Kensington workhouse. Several cases of fever, with mulberry rash, were admitted shortly before from the same locality.

When first seen, on the sixth day of disease, her mind was wandering. She fancied she had been in the hospital three days. There was no headache, she had slept a little. She was deaf. The tongue was dry and brown; the bowels slightly relaxed. There were, however, no abdominal signs; the pulse was only 80. There was slight want of resonance, and very feeble respiratory murmurs over the most depending part of the lungs, the patient lying on her back; the skin was warm and dry. Mulberry rash was well marked. The prostration was so great, that the patient was unable even to turn in bed unassisted. 4 oz. of gin were ordered to be given during the twenty-four hours in divided doses. On the next day the pulse had risen to 120; it was very weak; there was some somnolence; in other respects there was little change; she died at 7. a.m., on the ninth day of disease, apparently from asthenia.

The body was examined *thirty-one hours after death*; the weather being cool; the cadaveric rigidity had almost entirely disappeared; the spots observed during life continued; beneath and extending among the fibres of the left rectus abdominalis muscle was a loosely coagulated dark bloody clot, 2 in. in length, and 1 in. in breadth. It was situated, as above described, midway between the umbilicus and pubis.

The *heart* was flabby; the clots contained in it soft and dark; the lining membrane was stained dusky red; the lungs were deeply congested posteriorly; the mucous membrane of the stomach was smooth and free from rugæ; the consistence, thickness, and colour of the whole gastro-intestinal mucous membrane was normal; Peyer's patches in all particulars healthy; larynx, pharynx, and œsophagus healthy; there was no enlargement of the mesenteric glands. A few small cysts studded the cortical substance of the kidneys; the urinary bladder and uterus were normal in all particulars; the pancreas healthy; the liver very flabby and soft; the spleen somewhat enlarged.

Head.—The pia mater was congested; there was a little subarachnoid effusion of serosity; and the pia mater and arachnoid separated from the cerebral convolutions with abnormal facility. The substance of the encephalon itself appeared healthy in all respects.

This patient, like all affected with typhus fever when they make any mistake as to the duration of time, supposed it lengthened; thus she thought three days had elapsed between her entrance into the hospital and my first seeing her, whereas, really, it was only one day. In addition to the presence of a clot in the substance of the rectus abdominalis muscle, this case illustrates the early period at which death from typhus fever, uncomplicated with local lesion, may ensue. There was nothing found after death to account for the fatal termination. Some congestion of the most depending part of the lung—slight congestion of the pia mater—trifling enlargement of the spleen—and a small quantity of loosely coagulated blood in the substance of a muscle, were all the physical changes established during life which the scalpel enabled us to lay bare. The effect on the solids of the general disease, which latter itself our scalpel could not detect, was manifested by the flabby state of the heart and liver, the early disappearance of the cadaveric rigidity, &c.

In Case 9 an example was afforded of convulsions coincident with an effusion of blood into the cavity of the arachnoid. I shall now detail a case in which that lesion was detected after death, when there had been no symptoms to indicate its presence during life, Case 11; and then I shall narrate a case, No. 13, in which convulsions occurred, but which presented no lesion, excepting some congestion of the brain and its membranes, to account for so serious a symptom; and then Case 14, in which the cerebral spmptoms were very prominent during life, but in which, after death, not the slightest deviation from the normal condition of the encephalon or its membranes could be discovered.

Case 11.—After exposure to the contagion of fever accompanied with mulberry rash.

Ensued—rigors frequently repeated—pain in head and limbs—confined bowels—rapid prostration—hoarseness — deafness — disturbed vision — mental confusion—dry brown tongue—difficult deglutition —quick pulse—cool skin—mulberry rash—extreme difficulty of breathing—death on the 16th day.

Eleven hours after death, peristence of spots—clot in the substance of left rectus abdominalis muscle—clot in the cavity of arachnoid—slight congestion of the posterior part of lungs—softening of the mucous membrane of pharynx—thickening of rima glottidis—pus in larynx—other organs normal.

Mary G., aged 49, a moderately stout woman, subject to constant cough, was admitted into the London Fever Hospital, May 9th, 1848, under the care of Dr. Tweedie. Her daughter left the hospital three weeks before, and Mary G. washed her clothes. She was a native of London.

Present illness began 13 days before her admission with rigors frequently repeated—pains in the head and limbs, and confined bowels. She took to her bed entirely on the second day of disease, because she felt generally ill and extreme weakness. There had been no epistaxis. She had taken before admission several doses of aperient medicine. Hoarseness first made its appearance, her relations stated, on the 9th day of disease.

The following notes of her case were taken on the thirteenth day of disease:—No headache, slight deafness (not deaf till present illness), no delirium, memory defective; complains of seeing strange objects about the wards; she is quite conscious that these objects have no real existence; says she has a most disagreeable taste, and a constant sense of unpleasant odours; there is no flush of the face; she is unable to leave her bed without considerable assistance.

The tongue is brown and dry; she swallows either solids or liquids with considerable difficulty; there is swelling and dusky redness of the tonsils, uvula, and velum pendulum palati; she has passed two stools during the last twenty-four hours; there is neither pain, tenderness, fulness, resonance, nor gurgling of the abdomen; no appetite, no thirst.

She can speak only in a faint, hoarse whisper; no tenderness of the larynx; cough troublesome; some sonorous and mucous râles over both sides of the chest; percussion normal; pulse 120, weak; heart sounds normal; skin cool, covered with mulberry rash; vin. alb. ℥iv., jus. bov. On the fourteenth and fifteenth days there was little change in the local or general symptoms, excepting that the spots were paler somewhat on the fourteenth day, and she was quite unable to protrude her tongue, she passed her stools in bed on the fifteenth day. The muscular movements at the same time were extremely tremulous; the pulse had risen at the latter date to 128, was very weak, and the skin cool. She became very restless during the afternoon of the fifteenth day. Death occurred at 4 a.m., on the sixteenth day. For some hours before the fatal termination the breathing was exceedingly laboured. There were no convulsions, and no coma.

A blister was applied to the throat on the fourteenth day of disease, and at the same time the wine was increased to six ounces in the twenty-four hours. On the fifteenth day four ounces of gin were given, in addition to the wine.

Eleven hours after death the following appearances were observed:—The spots noted during life were still to be detected; there was no emaciation; at least 1½ inches of fat covered the abdominal parietes. Between the left rectus abdominalis muscle and its sheath, anteriorly and posteriorly, and also among the fibres of the muscle, which were at that place softer than elsewhere, was a considerable quantity of loosely coagulated blood. The extent occupied by the clot was about six inches by two inches. It commenced an inch above the pubis.

Head.—The bloody points on the external surface of the dura mater were very numerous. A little bloody serosity escaped on opening the cavity of the arachnoid. On either side, extending from the greater wing of the spheroid bone to the tentorium cerebelli, closely applied to the arachnoid covering the pia mater, and within the cavity of the arachnoid, was a film of coagulated blood of a bright red colour, with spots of a dark venous hue scattered over it at intervals. The difference in colour depended on the difference in the thickness of the clot. There was no trace of any clot in the longitudinal fissure, and no coagulum at the base of the brain. In the meshes of the pia mater was much colourless serosity; and a moderate amount of the same in the lateral ventricles. The bloody points on the cut surface of the cerebrum appeared more numerous than natural. There was increased vascularity of the plexus choroides. The consistence of the cerebral substance was natural.

There was no abnormal congestion of the *pulmonary tissue*. The lining membrane of the bronchial tubes was finely injected; the tubes themselves contained much muco-purulent fluid. The *pericardium* and *heart* were healthy. The clots in the heart were firm.

The mucous membrane of the *pharynx* was of a dirty yellow colour, and so soft that it could be readily removed by the slightest scraping from the subjacent tissue.

Larynx.—The rima glottidis was narrow, the mucous membrane of the whole larynx finely injected, and covered with a layer of purulent fluid. On and above the chordæ vocales was some solid opaque white matter, resembling lymph in physical character.

The *liver* was flabby; the *spleen* small, weighing only 4½ oz., was soft and flabby.

The *pancreas*, *urinary bladder*, and *uterus* were healthy. The *kidneys* contained numerous small cysts in their cortical substance.

The *œsophagus* was normal in appearance.

Stomach.—The whole of the coats of the great cul de sac were so soft that the finger passed through them with the greatest facility. Bluish white bands, from which the mucous membrane had disappeared, extend from the softened portion towards the pylorus. The whole mucous membrane of the stomach was exceedingly soft, but very pale.

Large and small intestines.—The thickness, colour, and consistence of the mucous membrane lining the intestinal canal, as well as the condition of Peyer's patches, were carefully noted. They were healthy in all particulars. The mesenteric glands were in their normal condition.

In this case there was much more blood within the cavity of the arachnoid than in Case 10, and yet there were no convulsions. The softened condition of the substance of the rectus abdominalis, and the presence of a clot of blood in it, are points worthy of attention, as showing the relation between the diseased condition of the solids and fluids generally, and the presence of hæmorrhage into the cavity of the arachnoid. Clots were found on both cerebral hemispheres. The absence of any trace of clot in the longitudinal fissure rendered it probable that the hæmorrhage occurred primarily on the two sides, *i. e.*, that the blood did not pass before coagulation from the one hemisphere to the other. As is common in cases of hæmorrhage into the arachnoidian, no trace of the vessels from which the blood escaped could be detected.

A small quantity of coagulated blood is, as I have before remarked, by no means infrequently found within the cavity of the arachnoid after death from typhus fever. Thus this lesion was discovered to exist in one-seventh of the cases of typhus fever which proved fatal during the progress of that disease analysed by myself in the *Edinburgh Monthly Journal* for October 1849, and my impression is, that such proportion does not ve[ry] exceed what the whole of the cases I hav[e] after death would afford. The quar[ter] however, I ought to remark, is often [to] have never seen the slightest trace [of] into the *substance of the brain*. Now, intense congestion of th[e] brain is frequently, almost [al]death from typhus fever. bral substance much more occur is infinitely less in[ten]

This case also illust[rates] as found in typhus f[ever] vances insidiously. violent symptom swelling of the physical obstr[uction]

comparatively trifling. It will be observed, that from the history of the symptoms, as well as from the more advanced stage of the disease of the pharyngeal than of the laryngeal mucous membrane, that the affection commenced, as it usually does, in the pharynx, and then spread down to the larynx. Deafness was noted in this case, as it was in Cases 3, 11, and 12. It is a common symptom in typhus fever. The softening of the stomach was cadaveric, a part of that tendency to softening of the tissues so eminently characteristic of the disease I am here considering. The sonorous râle, and the condition of the bronchial mucous membrane, were probably dependent on the chronic bronchitis, of which it appeared this woman had long been the subject.

Case 13.—Slight rigors, pains in back and abdomen—diarrhœa without medicine—sudden prostration—mental confusion—trifling headache, vertigo—brown and dry tongue—tenderness of abdomen—mulberry rash—convulsions—coma—*death*—persistence of spots—meningeal and cerebral congestion—blood very loosely coagulated—hypertrophy of the heart—other organs healthy.

Thomas B., aged 61, a printer, a thin man, whose previous health had been very good, was received into the London Fever Hospital, May 27th, 1848, on the 8th day of disease, under the care of Dr. Tweedie. He never had a fit of any kind before his admission into the hospital. His illness commenced with slight rigors and pain in the back and abdomen. His bowels were relaxed from the outset and before he took medicine of any kind. He kept his bed on the second day of illness.

On the 9th day of disease the following notes of his case were made:—

He states, when asked, that he has slight headache and some vertigo—he slept but little last night—his mind is somewhat confused. The tongue is dry and brown—the abdomen tender—the bowels much relaxed. He has passed five stools since his admission yesterday—there is no appetite and but little thirst.

The pulse is only 90. With the exception of rather extensive cardiac dulness, there are no abnormal physical chest signs.

The muscular powers are greatly impaired—he is quite unable to leave his bed unassisted, even to reach the closestool. The skin is warm and dry. There is abundant mulberry rash.

During the night he was seized with convulsions, throwing his arms about violently; he appeared at the time unconscious of all going on around him. This fit lasted for about ten minutes. He slept for some time before and after the fit.

When I saw him again on the following morning, *i. e.*, the 10th day of disease, he said he was free from headache—his mind was rather more confused than on the 9th day—the conjunctiva was injected, the pupils small—the urine was passed into the bed. On the following day he had a second attack of convulsions, which lasted, however, but a very few minutes. During this attack his limbs became very rigid and he foamed at the mouth, and after it he slept for half an hour. He was otherwise very wakeful and occasionally delirious. On the 11th day he continued watchful and delirious—there were frequent twitchings of the muscles of the face—the urine and the stools were passed into bed—the pulse was scarcely perceptible. He died at 11 a.m., on the 12th day of disease. He was comatose for some hours before death.

The body was examined twenty-seven hours after death—The spots marked during life were continued visible.

Head.—The dura mater [illegible] There was a little fluid [illegible] and a small quantity [illegible] mater. The arachnoid mater minutely injected [illegible] the brain. [illegible] studded the [illegible] of the cerebrum [illegible] natural. [illegible] distended [illegible] plexus [illegible]

Chest.—[illegible] black [illegible] still [illegible] blood [illegible]

[illegible]

stomach was smooth; the mucous membrane was posteriorly of reddish colour, anteriorly a darker red, and along the greater curvature of a vermillion hue; the redness was punctiform and capillary; the deeper red parts were slightly thickened and firmer than the surrounding; there was no softening of any part of the lining membrane; the larger vessels of the posterior wall of the organ were moderately full of blood; none were visible on the anterior surface of the organ.

The *mesenteric glands* and *intestines* were healthy in colour, thickness, and consistence.

The *pancreas, liver, kidneys, and urinary bladder*, were normal; the *gall bladder* contained some dark green bile; the *spleen* was dark and firm, and weighed 7½ oz.

Thus, with the exception of the congestion of the brain, by no means greater than in many cases when no convulsions occurred, there was no lesion to account for that symptom. The patient died at an early period of the disease, *i. e.* on the 12th day, and no local complication of importance was revealed by the scalpel. The convulsions and death were probably the result of the same cause, the diseased condition of the blood. I would wish particularly to direct the reader's attention to the fact, that diarrhœa, pain ain the abdomen, and tenderness of the belly, were among the earliest and most prominent symptoms, and yet there was no lesion of Peyer's patches, The tenderness, probably, depended on the condition of the gastric mucous membrane. I shall have, hereafter, to detail cases, in which constipation was a prominent symptom, and yet extensive ulceration of the agminated glands was detected after death. So that, *by themselves*, pain in the abdomen and diarrhœa, even when present in fever, are by no means *diagnostic* of lesion of Peyer's patches.

Case 14.—George C., aged 58, a stout, fair-complexioned man, was admitted into the London Fever Hospital, under the care of Dr. Tweedie, July 4th, 1848, labouring under typhus fever, accompanied with the diagnostic mulberry-rash. This man's wife and children were patients in the hospital some weeks before; they, too, laboured under typhus fever with mulberry rash. From his admission till about the fourteenth day of disease, when the following notes of his condition were taken, he was *violently* delirious:—"He sleeps very much—when roused is very delirious; he cannot be made to take his medicine; will not protrude his tongue; is unable to leave his bed unassisted; he has passed two stools during the last twenty-four hours; his pulse, which, up to this date, has not exceeded 96, is 108, and for the first time irregular; on the following day it reached 120 in the minute; it continued irregular, and, during the last twenty-four hours of life, was intermitting. On the fifteenth day, strabismus was observed for the first time; his eyes were both drawn upwards and inwards; his wife was struck by his appearance, and remarked spontaneously, that she had never seen him squint before his present illness; the spots grew darker as the disease advanced; coma preceded death for many hours; he died on about the eighteenth day of disease."

The following was the condition of the organs discovered, on an examination of the body twenty-four hours after death:—

There was no opacity of the arachnoid; a little fluid only in the cavity of that membrane; a little [illegible] in the meshes of the pia mater; [illegible] of the latter; the arachnoid and [illegible] from the surface of the brain; [illegible] any of the [illegible] in the [illegible] than [illegible] brain; the [illegible] normal. [illegible] in the [illegible] proved [illegible] very flabby con- [illegible] the lining membrane [illegible] sky red,—a nearly fluid [illegible] throughout the body,—[illegible] [illegible] on of the pu[illegible] [illegible] central pu[illegible] [illegible] —and s[illegible] [illegible] mach,— [illegible] I ha[illegible] [illegible] ere [illegible]

[illegible]

able to afford the slightest explanation of the morbid vital phenomena, by the demonstration of any change of structure within the cranium. An irregular or intermitting pulse is by no means rare in typhus fever, when no old disease of that organ is detected after death.

I do not give a case illustrative of the pathological appearances observed within the cranium after death from typhus fever, complicated with inflammation of the brain or its membrane, for this reason, because *I have never made an examination, after death, of a case of typhus fever, in which such appearances were present.* The assertion that the symptoms of typhus fever are due to inflammation of the brain, rests on as untenable grounds as that of the same disease in gastro-enteritis.

COMA VIGIL.

Case 15.—Maria W., aged 52, was first seen on the ninth day of disease; at that time the symptoms of typhus fever were present. She slept much, and on the tenth day almost constantly, night and day. Somnolence continued till about the middle of the thirteenth day, gradually, however, becoming less constant. From the time of the visit, on the thirteenth day, till her death, at 1 a.m. on the fifteenth day, she never closed her eyes. On the fourteenth day, the following note was made:—She lies constantly on her back; eyes open; has not closed them since the visit yesterday; cannot be made to open her mouth, or to attempt to protrude her tongue; gives no sign of consciousness when spoken to. The skin is cool and sweating profusely; the spots are darker than on admission; there are no sudamina.

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"He has been since last evening in his present condition. Is now lying on his back, his eyes open, but he is apparently unconscious of all going on around him. He cannot be made to protrude his tongue, or even to make any effort to do so; yet he swallows a little fluid when poured into his mouth. His pupil acts very little by the aid of a candle. Pulse 132, very weak. Urinary bladder distended; urine passing into the bed. The mulberry rash is well marked. A blister was applied to his forehead, and on the following day the pulse had fallen to 108. He had some sleep; assisted himself to drink; protruded his tongue fully when bidden; and the spots were much paler. From this time he rapidly recovered."

It will be observed, that the condition described as having existed in the two last described cases was very different from somnolence or ordinary coma. It was the opposite of that described as *coma vigil* by Chomel and some other writers, *i. e.*, a condition in which the patient sleeps as much, or even more than in health, and yet declares that he has never closed his eyes.

PREGNANCY is by no means a necessarily fatal complication of typhus fever; nor do pregnant women necessarily miscarry, as the two following cases, 17 and 18, prove.

Case 17.—Mary Ann G., aged 23, a stout, well-[illegible] woman, was received into the London [illegible] Hospital, August 18, 1847, on the ninth day of disease, under the care of Dr. Tweedie. Her [illegible] also suffering from typhus fever, was admitted [illegible] her. This woman was between seven and eight [illegible] months gone with child. She had well-marked severe [illegible] typhus fever. The mulberry rash was copious and [illegible] characteristic. Her pulse on the tenth day of disease [illegible] was 140, and on the twelfth day 150; the tongue dry [illegible] and brown, and the spots dark. On the fifteenth [illegible] day of disease the pulse had fallen to 100; the tongue [illegible] was moist, and the spots were fading. Vomiting

of the blood, and the smoothness of the mucous membrane of the stomach are both commonly present after death from typhus fever. But softening of the mucous membrane of the intestinal canal is very rarely seen to the same extent as in this particular case. There had been no signs to indicate its existence during life; and it is probable that it was in a great measure cadaveric. Peyer's patches, and the mesenteric glands, it is to be observed, were in all respects in their normal state.

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Mary B., aged 70, a thin woman, with grey hair, came under observation on the sixth day of disease. No particulars of the symptoms present before her admission into the London Fever Hospital, under the care of Dr. Tweedie, July 21st, 1848, could be obtained. She had resided for some years preceding her admission in Kensington workhouse. Several cases of fever, with mulberry rash, were admitted shortly before from the same locality.

When first seen, on the sixth day of disease, her mind was wandering. She fancied she had been in the hospital three days. There was no headache, she had slept a little. She was deaf. The tongue was dry and brown; the bowels slightly relaxed. There were, however, no abdominal signs; the pulse was only 80. There was slight want of resonance, and very feeble respiratory murmurs over the most depending part of the lungs, the patient lying on her back; the skin was warm and dry. Mulberry rash was well marked. The prostration was so great, that the patient was unable even to turn in bed unassisted. 4 oz. of gin were ordered to be given during the twenty-four hours in divided doses. On the next day the pulse had risen to 120; it was very weak; there was some somnolence; in other respects there was little change; she died at 7. a.m., on the ninth day of disease, apparently from asthenia.

The body was examined *thirty-one hours after death*; the weather being cool; the cadaveric rigidity had almost entirely disappeared; the spots observed during life continued; beneath and extending among the fibres of the left rectus abdominalis muscle was a loosely coagulated dark bloody clot, 2 in. in length, and 1 in. in breadth. It was situated, as above described, midway between the umbilicus and pubis.

The *heart* was flabby; the clots contained in it soft and dark; the lining membrane was stained dusky red; the lungs were deeply congested posteriorly; the mucous membrane of the stomach was smooth and free from rugæ; the consistence, thickness, and colour of the whole gastro-intestinal mucous membrane was normal; Peyer's patches in all particulars healthy; larynx, pharynx, and œsophagus healthy; there was no enlargement of the mesenteric glands. A few small cysts studded the cortical substance of the kidneys; the urinary bladder and uterus were normal in all particulars; the pancreas healthy; the liver very flabby and soft; the spleen somewhat enlarged.

Head.—The pia mater was congested; there was a little subarachnoid effusion of serosity; and the pia mater and arachnoid separated from the cerebral convolutions with abnormal facility. The substance of the encephalon itself appeared healthy in all respects.

This patient, like all affected with typhus fever when they make any mistake as to the duration of time, supposed it lengthened; thus she thought three days had elapsed between her entrance into the hospital and my first seeing her, whereas, really, it was only one day. In addition to the presence of a clot in the substance of the rectus abdominalis muscle, this case illustrates the early period at which death from typhus fever, uncomplicated with local lesion, may ensue. There was nothing found after death to account for the fatal termination. Some congestion of the most depending part of the lung—slight congestion of the pia mater—trifling enlargement of the spleen—and a small quantity of loosely coagulated blood in the substance of a muscle, were all the physical changes established during life which the scalpel enabled us to lay bare. The effect on the solids of the general disease, which latter itself our scalpel could not detect, was manifested by the flabby state of the heart and liver, the early disappearance of the cadaveric rigidity, &c.

In Case 9 an example was afforded of convulsions coincident with an effusion of blood into the cavity of the arachnoid. I shall now detail a case in which that lesion was detected after death, when there had been no symptoms to indicate its presence during life, Case 11; and then I shall narrate a case, No. 13, in which convulsions occurred, but which presented no lesion, excepting some congestion of the brain and its membranes, to account for so serious a symptom; and then Case 14, in which the cerebral spmptoms were very prominent during life, but in which, after death, not the slightest deviation from the normal condition of the encephalon or its membranes could be discovered.

Case 11.—After exposure to the contagion of fever accompanied with mulberry rash.

Ensued—rigors frequently repeated—pain in head and limbs—confined bowels—rapid prostration—hoarseness — deafness — disturbed vision — mental confusion—dry brown tongue—difficult deglutition —quick pulse—cool skin—mulberry rash—extreme difficulty of breathing—death on the 16th day.

Eleven hours after death, persistence of spots—clot in the substance of left rectus abdominalis muscle—clot in the cavity of arachnoid—slight congestion of the posterior part of lungs—softening of the mucous membrane of pharynx—thickening of rima glottidis—pus in larynx—other organs normal.

Mary G., aged 49, a moderately stout woman, subject to constant cough, was admitted into the London Fever Hospital, May 9th, 1848, under the care of Dr. Tweedie. Her daughter left the hospital three weeks before, and Mary G. washed her clothes. She was a native of London.

Present illness began 13 days before her admission with rigors frequently repeated—pains in the head and limbs, and confined bowels. She took to her bed entirely on the second day of disease, because she felt generally ill and extreme weakness. There had been no epistaxis. She had taken before admission several doses of aperient medicine. Hoarseness first made its appearance, her relations stated, on the 9th day of disease.

The following notes of her case were taken on the thirteenth day of disease:—No headache, slight deafness (not deaf till present illness), no delirium, memory defective; complains of seeing strange objects about the wards; she is quite conscious that these objects have no real existence; says she has a most disagreeable taste, and a constant sense of unpleasant odours; there is no flush of the face; she is unable to leave her bed without considerable assistance.

The tongue is brown and dry; she swallows either solids or liquids with considerable difficulty; there is swelling and dusky redness of the tonsils, uvula, and velum pendulum palati; she has passed two stools during the last twenty-four hours; there is neither pain, tenderness, fulness, resonance, nor gurgling of the abdomen; no appetite, no thirst.

She can speak only in a faint, hoarse whisper; no tenderness of the larynx; cough troublesome; some sonorous and mucous râles over both sides of the chest; percussion normal; pulse 120, weak; heart sounds normal; skin cool, covered with mulberry rash; vin. alb. ʒiv., jus. bov. On the fourteenth and fifteenth days there was little change in the local or general symptoms, excepting that the spots were paler somewhat on the fourteenth day, and she was quite unable to protrude her tongue, she passed her stools in bed on the fifteenth day. The muscular movements at the same time were extremely tremulous; the pulse had risen at the latter date to 128, was very weak, and the skin cool. She became very restless during the afternoon of the fifteenth day. Death occurred at 4 a.m., on the sixteenth day. For some hours before the fatal termination the breathing was exceedingly laboured. There were no convulsions, and no coma.

A blister was applied to the throat on the fourteenth day of disease, and at the same time the wine was increased to six ounces in the twenty-four hours. On the fifteenth day four ounces of gin were given, in addition to the wine.

Eleven hours after death the following appearances were observed:—The spots noted during life were still to be detected; there was no emaciation; at least 1½ inches of fat covered the abdominal parietes. Between the left rectus abdominalis muscle and its sheath, anteriorly and posteriorly, and also among the fibres of the muscle, which were at that place softer than elsewhere, was a considerable quantity of loosely coagulated blood. The extent occupied by the clot was about six inches by two inches. It commenced an inch above the pubis.

Head.—The bloody points on the external surface of the dura mater were very numerous. A little bloody serosity escaped on opening the cavity of the arachnoid. On either side, extending from the greater wing of the spheroid bone to the tentorium cerebelli, closely applied to the arachnoid covering the pia mater, and within the cavity of the arachnoid, was a film of coagulated blood of a bright red colour, with spots of a dark venous hue scattered over it at intervals. The difference in colour depended on the difference in the thickness of the clot. There was no trace of any clot in the longitudinal fissure, and no coagulum at the base of the brain. In the meshes of the pia mater was much colourless serosity; and a moderate amount of the same in the lateral ventricles. The bloody points on the cut surface of the cerebrum appeared more numerous than natural. There was increased vascularity of the plexus choroides. The consistence of the cerebral substance was natural.

There was no abnormal congestion of the *pulmonary tissue*. The lining membrane of the bronchial tubes was finely injected; the tubes themselves contained much muco-purulent fluid. The *pericardium* and *heart* were healthy. The clots in the heart were firm.

The mucous membrane of the *pharynx* was of a dirty yellow colour, and so soft that it could be readily removed by the slightest scraping from the subjacent tissue.

Larynx.—The rima glottidis was narrow, the mucous membrane of the whole larynx finely injected, and covered with a layer of purulent fluid. On and above the chordæ vocales was some solid opaque white matter, resembling lymph in physical character.

The *liver* was flabby; the *spleen* small, weighing only 4½ oz., was soft and flabby.

The *pancreas*, *urinary bladder*, and *uterus* were healthy. The *kidneys* contained numerous small cysts in their cortical substance.

The *œsophagus* was normal in appearance.

Stomach.—The whole of the coats of the great cul de sac were so soft that the finger passed through them with the greatest facility. Bluish white bands, from which the mucous membrane had disappeared, extend from the softened portion towards the pylorus. The whole mucous membrane of the stomach was exceedingly soft, but very pale.

Large and small intestines.—The thickness, colour, and consistence of the mucous membrane lining the intestinal canal, as well as the condition of Peyer's patches, were carefully noted. They were healthy in all particulars. The mesenteric glands were in their normal condition.

In this case there was much more blood within the cavity of the arachnoid than in Case 10, and yet there were no convulsions. The softened condition of the substance of the rectus abdominalis, and the presence of a clot of blood in it, are points worthy of attention, as showing the relation between the diseased condition of the *solids* and fluids generally, and the presence of hæmorrhage into the cavity of the arachnoid. Clots were found on both cerebral hemispheres. The absence of any trace of clot in the longitudinal fissure rendered it probable that the hæmorrhage occurred primarily on the two sides, *i. e.*, that the blood did not pass before coagulation from the one hemisphere to the other. As is common in cases of hæmorrhage into the arachnoidian, no trace of the vessels from which the blood escaped could be detected.

A small quantity of coagulated blood is, as I have before remarked, by no means infrequently found within the cavity of the arachnoid after death from typhus fever. Thus this lesion was discovered to exist in one-seventh of the cases of typhus fever which proved fatal during the progress of that disease analysed by myself in the *Edinburgh Monthly Journal* for October 1849, and my impression is, that such proportion does not very far exceed what the whole of the cases I have examined after death would afford. The quantity of blood, however, I ought to remark, is often very small. I have never seen the slightest trace of hæmorrhage into the *substance of the brain* after typhus fever. Now, intense congestion of the membranes of the brain is frequently, almost constantly, found after death from typhus fever. Congestion of the cerebral substance much more rarely; and when it does occur is infinitely less intense.

This case also illustrates one form of laryngitis, as found in typhus fever, *i. e.*, that form which advances insidiously, and is unattended with those violent symptoms which are consequent on sudden swelling of the submucous tissue of the larynx. The physical obstruction to the entrance of the air was

comparatively trifling. It will be observed, that from the history of the symptoms, as well as from the more advanced stage of the disease of the pharyngeal than of the laryngeal mucous membrane, that the affection commenced, as it usually does, in the pharynx, and then spread down to the larynx. Deafness was noted in this case, as it was in Cases 3, 11, and 12. It is a common symptom in typhus fever. The softening of the stomach was cadaveric, a part of that tendency to softening of the tissues so eminently characteristic of the disease I am here considering. The sonorous râle, and the condition of the bronchial mucous membrane, were probably dependent on the chronic bronchitis, of which it appeared this woman had long been the subject.

Case 13.—Slight rigors, pains in back and abdomen—diarrhœa without medicine—sudden prostration—mental confusion—trifling headache, vertigo—brown and dry tongue—tenderness of abdomen—mulberry rash—convulsions—coma—*death*—persistence of spots—meningeal and cerebral congestion—blood very loosely coagulated—hypertrophy of the heart—other organs healthy.

Thomas B., aged 61, a printer, a thin man, whose previous health had been very good, was received into the London Fever Hospital, May 27th, 1848, on the 8th day of disease, under the care of Dr. Tweedie. He never had a fit of any kind before his admission into the hospital. His illness commenced with slight rigors and pain in the back and abdomen. His bowels were relaxed from the outset and before he took medicine of any kind. He kept his bed on the second day of illness.

On the 9th day of disease the following notes of his case were made:—

He states, when asked, that he has slight headache and some vertigo—he slept but little last night—his mind is somewhat confused. The tongue is dry and brown—the abdomen tender—the bowels much relaxed. He has passed five stools since his admission yesterday—there is no appetite and but little thirst.

The pulse is only 90. With the exception of rather extensive cardiac dulness, there are no abnormal physical chest signs.

The muscular powers are greatly impaired—he is quite unable to leave his bed unassisted, even to reach the closestool. The skin is warm and dry. There is abundant mulberry rash.

During the night he was seized with convulsions, throwing his arms about violently; he appeared at the time unconscious of all going on around him. This fit lasted for about ten minutes. He slept for some time before and after the fit.

When I saw him again on the following morning, *i. e.*, the 10th day of disease, he said he was free from headache—his mind was rather more confused than on the 9th day—the conjunctiva was injected, the pupils small—the urine was passed into the bed. On the following day he had a second attack of convulsions, which lasted, however, but a very few minutes. During this attack his limbs became very rigid and he foamed at the mouth, and after it he slept for half an hour. He was otherwise very wakeful and occasionally delirious. On the 11th day he continued watchful and delirious—there were frequent twitchings of the muscles of the face—the urine and the stools were passed into bed—the pulse was scarcely perceptible. He died at 11 a.m., on the 12th day of disease. He was comatose for some hours before death.

The body was examined twenty-seven hours after death.—The spots marked during life continued visible.

Head.—The dura mater was considerably congested. There was a little fluid in the cavity of the arachnoid, and a small quantity infiltrated the meshes of the pia mater. The arachnoid was rather opaque. The pia mater minutely injected over the whole surface of the brain. Numerous but minute bloody points studded the cut surface of the grey and white matter of the cerebrum. The consistence of the brain was natural. The lateral ventricles were moderately distended with colourless fluid. The vessels of the plexus choroides were loaded with blood.

Chest.—With the exception of a very small soft black clot in the right auricle and ventricle, and a still smaller clot in the left auricle and ventricle, the blood was fluid throughout the body.

Pericardium healthy.

Heart somewhat enlarged and hypertrophied.

Larynx—bronchial tubes—bronchial glands and *lungs* healthy in appearance.

Pharynx and œsophagus normal.

Stomach.—With the exception of a few rugæ, along the greater curvature, and trifling mammillation near the pylorus, the mucous membrane of the stomach was smooth; the mucous membrane was posteriorly of reddish colour, anteriorly a darker red, and along the greater curvature of a vermillion hue; the redness was punctiform and capillary; the deeper red parts were slightly thickened and firmer than the surrounding; there was no softening of any part of the lining membrane; the larger vessels of the posterior wall of the organ were moderately full of blood; none were visible on the anterior surface of the organ.

The *mesenteric glands* and *intestines* were healthy in colour, thickness, and consistence.

The *pancreas, liver, kidneys, and urinary bladder*, were normal; the *gall bladder* contained some dark green bile; the *spleen* was dark and firm, and weighed 7½ oz.

Thus, with the exception of the congestion of the brain, by no means greater than in many cases when no convulsions occurred, there was no lesion to account for that symptom. The patient died at an early period of the disease, *i. e.* on the 12th day, and no local complication of importance was revealed by the scalpel. The convulsions and death were probably the result of the same cause, the diseased condition of the blood. I would wish particularly to direct the reader's attention to the fact, that diarrhœa, pain ain the abdomen, and tenderness of the belly, were among the earliest and most prominent symptoms, and yet there was no lesion of Peyer's patches, The tenderness, probably, depended on the condition of the gastric mucous membrane. I shall have, hereafter, to detail cases, in which constipation was a prominent symptom, and yet extensive ulceration of the agminated glands was detected after death. So that, *by themselves*, pain in the abdomen and diarrhœa, even when present in fever, are by no means *diagnostic* of lesion of Peyer's patches.

Case 14.—George C., aged 58, a stout, fair-complexioned man, was admitted into the London Fever Hospital, under the care of Dr. Tweedie, July 4th, 1848, labouring under typhus fever, accompanied with the diagnostic mulberry-rash. This man's wife and children were patients in the hospital some weeks before; they, too, laboured under typhus fever with mulberry rash. From his admission till about the fourteenth day of disease, when the following notes of his condition were taken, he was *violently* delirious:—"He sleeps very much—when roused is very delirious; he cannot be made to take his medicine; will not protrude his tongue; is unable to leave his bed unassisted; he has passed two stools during the last twenty-four hours; his pulse, which, up to this date, has not exceeded 96, is 108, and for the first time irregular; on the following day it reached 120 in the minute; it continued irregular, and, during the last twenty-four hours of life, was intermitting. On the fifteenth day, strabismus was observed for the first time; his eyes were both drawn upwards and inwards; his wife was struck by his appearance, and remarked spontaneously, that she had never seen him squint before his present illness; the spots grew darker as the disease advanced; coma preceded death for many hours; he died on about the eighteenth day of disease."

The following was the condition of the organs discovered, on an examination of the body twenty-four hours after death:—

There was no opacity of the arachnoid; a little fluid only in the cavity of that membrane; a little colourless serosity in the meshes of the pia mater; slight congestion of the latter; the arachnoid and pia mater separate in one mass from the surface of the convolutions, without carrying away any of the cerebral substance; a little transparent serosity in the ventricles; there were a few more red points than common in the white substance of the brain; the consistence of that organ was perfectly normal.

With the exception of some red serosity in the pericardium, which microscopic examination proved to contain no blood corpuscles,—a very flabby condition of the heart, the lining membrane of which was stained dusky red,—a nearly fluid condition of the blood throughout the body,—a limited amount of consolidation of the pulmonary tissue of the left lung from central pneumonia,—flabby liver,—dark thick bile,—and smoothness of the lining membrane of the stomach,—common after death from typhus fever, as I have before pointed out, the whole of the organs were in a normal state.

I have narrated the above scanty particulars of this case, in order that the reader may have another illustration of the frequent presence of what are called head-symptoms,—violent delirium, squinting, and coma,—and yet after death-examination be unable to afford the slightest explanation of the morbid vital phenomena, by the demonstration of any change of structure within the cranium. An irregular or intermitting pulse is by no means rare in typhus fever, when no old disease of that organ is detected after death.

I do not give a case illustrative of the pathological appearances observed within the cranium after death from typhus fever, complicated with inflammation of the brain or its membrane, for this reason, because *I have never made an examination, after death, of a case of typhus fever, in which such appearances were present.* The assertion that the symptoms of typhus fever are due to inflammation of the brain, rests on as untenable grounds as that of the same disease in gastro-enteritis.

COMA VIGIL.

Case 15.—Maria W, aged 52, was first seen on the ninth day of disease; at that time the symptoms of typhus fever were present. She slept much, and on the tenth day almost constantly, night and day. Somnolence continued till about the middle of the thirteenth day, gradually, however, becoming less constant. From the time of the visit, on the thirteenth day, till her death, at 1 a.m. on the fifteenth day, she never closed her eyes. On the fourteenth day, the following note was made:—She lies constantly on her back; eyes open; has not closed them since the visit yesterday; cannot be made to open her mouth, or to attempt to protrude her tongue; gives no sign of consciousness when spoken to. The skin is cool and sweating profusely; the spots are darker than on admission; there are no sudamina.

The body was examined twenty-two hours after death. There was some colourless serosity in the cavity of the arachnoid; a little similar fluid in the meshes of the pia mater; a moderate quantity in the ventricles. The pia mater, arachnoid, and cerebral substance, appeared healthy in colour and consistence.

Thus, no condition of the encephalon was detected, to account for the peculiar symptom above described.

I have seen one person only recover from this state, and in that case the coma vigil was not complete.

Case 16.—George P., aged 30, a surgeon, was received into the London Fever Hospital, June 2nd, 1849, on the eighth day of disease, under the care of Dr. Tweedie. He had well-marked and very severe typhus fever. At the time of his admission the mulberry rash was very abundant. On the sixteenth day the following note was made:—

"He has been since last evening in his present condition. Is now lying on his back, his eyes open, but he is apparently unconscious of all going on around him. He cannot be made to protrude his tongue, or even to make any effort to do so; yet he swallows a little fluid when poured into his mouth. His pupil acts very little by the aid of a candle. Pulse 132, very weak. Urinary bladder distended; urine passing into the bed. The mulberry rash is well marked. A blister was applied to his forehead, and on the following day the pulse had fallen to 108. He had some sleep; assisted himself to drink; protruded his tongue fully when bidden; and the spots were much paler. From this time he rapidly recovered."

It will be observed, that the condition described as having existed in the two last described cases was very different from somnolence or ordinary coma. It was the opposite of that described as coma vigil by Chomel and some other writers, *i. e.*, a condition in which the patient sleeps as much, or even more than in health, and yet declares that he has never closed his eyes.

PREGNANCY is by no means a necessarily fatal complication of typhus fever; nor do pregnant women necessarily miscarry, as the two following cases, 17 and 18, prove.

Case 17.—Mary Ann G., aged 23, a stout, well-made, married woman, was received into the London Fever Hospital, August 18, 1847, on the ninth day of disease, under the care of Dr. Tweedie. Her brother also suffering from typhus fever, was admitted with her. This woman was between seven and eight months gone with child. She had well-marked severe typhus fever. The mulberry rash was copious and characteristic. Her pulse on the tenth day of disease was 140, and on the twelfth day 150; the tongue dry and brown, and the spots dark. On the fifteenth day of disease the pulse had fallen to 100; the tongue was moist, and the spots were fading. Vomiting

became very troublesome during convalescence. She left the hospital in the early part of September.

Case 18.—Margaret G., aged 36, night-nurse in the London Fever Hospital, came under observation on the 6th day of disease, March 2nd, 1849. She was then about seven months gone with child; she had severe typhus fever; thus, on the 12th day of disease, her pulse was 140; her mind was confused; the mulbery rash was dark and characteristic; from this time she slowly recovered. Like case 17, she suffered much from vomiting during convalescence.

This woman left the hospital at the beginning of April; went her full time, and was then delivered of a living child. I saw her about two months after her confinement; she said that she had a very good time. The child, I saw; it was small, and did not look very healthy; but the mother informed me it was strong, and it appeared to her to be thriving. This woman had been confined to her bed for a fortnight in the preceding November, *i. e.*, when two months advanced in the same pregnancy, with modified small-pox. I saw her daily during that attack, and for a few days she was exceedingly ill; she was, moreover, the subject of rather extensive valvular disease of the heart.

HOSPITAL REPORTS.

ST. BARTHOLOMEW'S HOSPITAL.

SPONTANEOUS SEPARATION OF A LARGE TUMOUR FROM THE THIGH, AFTER AN UNSUCCESSFUL ATTEMPT AT REMOVAL BY OPERATION.

The following very remarkable case has recently been discharged from the hospital, a perfect cure. We are, therefore, enabled to give a complete report of the many interesting points belonging to it, from the commencement to the close.

Evan Davies, a thoroughly robust and healthy looking man, about 46 years of age, was admitted into "Henry" Ward, under the care of Mr. Lawrence, on the 4th of October, 1849. He had a large tumour on the front of the right thigh, just above the middle. It was of a nearly spherical shape, between four and five inches in diameter, uniform on the surface, compact and elastic to the feel. It was, evidently, deeply imbedded in the thigh. As one might expect of a tumour so situated, it could be moved very little independently of its surrounding connexions; at the same time, there was no reason for believing that it was in any way fixed to the bone. The superincumbent skin was quite healthy, and so was all the rest of the limb.

We gathered from him the following history. About nine months ago, while engaged in the execution of his duty as a constable, he was kicked on that part of the thigh where the disease subsequently appeared. The kick was so severe that he was compelled to remain at rest for a few days, and apply leeches to the affected part. Not till two months, or thereabouts, after this injury, did he perceive any trace of the tumour. Various means were then tried with a view to disperse it; and, amongst others, a thorough salivation; but the lump steadily progressed in size, and became gradually more painful, especially after unusual exercise. Under these circumstances, he determined to come up to London for the benefit of the best surgical advice, and had the good fortune to fall under the care of Mr. Lawrence.

Mr. Lawrence, after maturely considering all the circumstances of this case, recommended the man to submit to an operation for the removal of the tumour, and on these grounds:—1. The disease could be got rid of in no other way, and was progressing in size; 2. Its nature, though uncertain, was in all probability innocent; 3. Its mobility and connexions were such as to justify the hope that it might be entirely removed; 4. The patient was in the best possible health. Accordingly, on the 23rd of October, with the approbation of all his colleagues, Mr. Lawrence undertook the operation, the patient being under the influence of chloroform. A free crucial incision was made through the integument. The sartorius muscle, which crossed over the tumour, was then divided, and thus the entire front of the disease was laid bare. It was firm in texture, and so exceedingly vascular, that it bled profusely at the least touch of the knife. After a little further dissection, it was soon apparent, that the deep-seated connexions of the tumour were such as to render its removal next to impossible. On the one side it was firmly incorporated with the rectus and vastus internus; on the other, with the adductor muscles; and a portion of it seemed to be prolonged upwards towards the pelvis. Thus, scarcely any part of its circumference could be detached. Moreover, in attempting to do this, a very large artery was divided, and bled profusely before it could be secured. The operation was then given up, but not before so much blood had been lost, that fears were entertained lest the patient should die on the table.

Notwithstanding the profuse hæmorrhage, the patient suffered less than might have been expected from the operation. He soon rallied, and the wound began to granulate. On the sixth day it was discovered, that the tumour was beginning to slough. The sloughing increased with such rapidity, that, by the eighteenth day, the entire tumour had perished, and become detached from its connexions; so that Mr. Lawrence drew out the disease *en masse* from its bed in the thigh. On careful examination of the disease thus removed, the femoral vessels were found running through the centre of it. This circumstance accounts for a symptom which we have not hitherto mentioned, namely, the considerable swelling of the whole limb after the operation.

The large excavation in the thigh left after the separation of the slough, has been filled up by healthy granulations, and the patient has left the Hospital with the perfect use of the limb, and with every prospect that there will be no return of the disease.

The chief practical point deducible from this case is the caution with which we ought to estimate the connexions and extent of a tumour by its looseness and mobility. In this instance, there was no reason to suppose that the tumour had such deep connexions as would prevent its complete removal; but it proved otherwise. The subsequent spontaneous detachment of the growth by sloughing is a most rare occurrence.

As a contrast to the preceding case we relate the following, in some respects parallel to it, which occurred some time ago in the Hospital.

LARGE TUMOUR ON THE SIDE OF THE NECK—OPERATION—SUBSEQUENT VERY RAPID GROWTH OF THE DISEASE—DEATH—DISSECTION OF THE PARTS CONCERNED.

A stout, healthy-looking girl, sixteen years of age, came under the care of Mr. Stanley, on account of a tumour about the size of a large orange, of an oblong form, with the long axis vertical, situated on the right side of the neck. It had existed upwards of ten months, and was first noticed as a small moveable lump, beneath the skin. Its subsequent growth had been slow. It had never occasioned pain, or interfered with the general health. The tumour, when grasped and compressed, was firm to the feel, and so loose and moveable on the subjacent parts, as to justify the belief that its base had no deep connexions. The skin covering it was perfectly healthy, and there was no enlargement of the neighbouring glands.

As there was no ground for supposing the tumour to be malignant, as it was increasing in size, and the patient was anxious to have it removed, the operation was undertaken by Mr. Stanley. When the skin was turned aside, the mastoid muscle was seen expanded over the tumour. The muscle was divided transversely, and then it was discovered that the inner border of the tumour extended so deeply and so far towards the middle of the neck, that its surface was in close connexion with the sheath of the great vessels. By careful dissection, the detachment of the tumour from the sheath of the vessels was effected; but, when the last stage of the operation,—the removal of the tumour from the subjacent parts, was attempted, insuperable difficulties arose. Its base was found to extend to the transverse processes of the cervical vertebræ, and it was clear that the cervical plexus of nerves was implicated in its substance.

Under these circumstances, so much of the tumour as could with safety be removed, was cut off in slices, and this was continued until the increasing hæmorrhage from the cut surface of the tumour forbad any further proceeding.

The operation was followed by very little constitutional disturbance. The tumour began to slough, and a hope was entertained that the remaining portion of it might perish, in consequence of the disturbance of its connexions. But a change of the opposite kind ensued. About the third week after the operation, the tumour began to increase so rapidly, that, at the end of the following week, it had nearly attained the size of the patient's head. No serious amount of constitutional mischief came on till the fifth week after the operation, when the patient gradually sank, and died at the end of the sixth.

Post-mortem examination.—The deeper portion of the tumour extended to the transverse processes of the cervical vertebræ, with which it was intimately connected. The carotid artery and the nervus vagus were closely united to its inner border. The hypoglossal nerve was buried in its substance. The phrenic nerve was displaced by, but not implicated in the tumour.

The tumour itself was of the consistence of firm jelly, of a yellowish colour, and semi-transparent, and permeated throughout by vessels. Examined microscopically, it was found to consist of a fibrous stroma, of oil globules in great quantity, and of irregular shaped cells, some of which were caudate.

ENCEPHALOID DISEASE OF THE TESTICLE, WITHOUT ANY LOCAL PAIN, OR DISTURBANCE OF THE GENERAL HEALTH.

Mr. Lawrence brought to the Museum an enlarged testicle, which he had recently removed from a private patient. It was about the size of the closed fist, and even on the surface. When cut into, it presented, in the most marked form, all the characters of encephaloid, or pulpy degeneration. The disease had only been five months in progress, and had not been attended with pain, or even the slightest disturbance of the general health. The patient from whom it was taken was said to be of remarkably healthy appearance at the present time.

PROGRESS OF MEDICAL SCIENCE.

FRANCE.

(Paris Correspondence.)

CHOLERA HONOURS.

The "Cholera Rewards" of the Republic have been completed this week by an extensive distribution of crosses of the Legion of Honour amongst the provincial physicians who distinguished themselves during the epidemic. Medals have also been awarded to the Sisters of Charity in the provinces, whose zeal and devotedness in the cause of suffering and humanity are above all praise. To our own Government we might say, "Go thou and do likewise;" but any suggestion of the kind were speaking to the deaf. Until the Medical Profession in England be raised by wise reform to the rank which it has a right to occupy, it will be vain to demand due consideration for its members, however honourable or worthy of honour they may be.

The German papers bring us the news of the death of Walther of Munich, one of the oldest and most distinguished of the German professors. He was the author of the "Anatomical Museum," and many other works of standard merit, though ancient date.

ANALYSIS OF THE CHYLE AND BLOOD.

At the last meeting of the Academy of Sciences, M. Milot presented a memoir on this subject. The author analyzed simultaneously the chyle and blood of two dogs, which had been submitted to different kinds of alimentation. One had taken nothing for two days except milk; the other had been fed during the same time with a quantity of fat, mixed with bread and meat. The blood of the first contained carbon and nitrogen in the same proportions as albumen, but it also contained a great excess of oxygen. The chyle presented a corresponding change, and resembled albumen, with an excess of oxygen.

In the blood of the second dog were found carbon

and nitrogen in the proportions which constitute albumen; but it was hydrogen, not oxygen, which it contained in excess; and the same change was observed in the chyle, which latter fluid was extremely rich in hydrogen.

The practical remarks which M. Milot deduces from his experiments are important. They prove that the arterial blood of an animal is essentially modified, by the diet to which the animal may have been submitted. The analysis of the first blood shows that, in addition to the albumen, fibrin, and globules, it contains a considerable proportion of oxygenated matter, which, in all probability, furnishes the products of secretions that abound in this principle. In the second blood, the same elements for oxydation probably exist also; but they are combined with a considerable quantity of fatty matter, introduced by assimilation.

At the Academy of Medicine, little worthy of note occurred last week. The librarian of the Academy, who had been sent with the Expedition to Rome, wrote to announce that he had made some very interesting discoveries in the manuscripts of the library at the Vatican. One of the last works of an ancient writer has, I believe, been recovered. This announcement came very *apropos* to restore the good humour of the academicians, disturbed by a terrible report from MM. Bousquet and Bouillaud against poor Piorry, his plessimeter, and other like fantasies. A certain Dr. Durand had ventured to support, in a long memoir, the hazardous theory, that intermittent fever and engorgement of the spleen are one and the same thing. Carried away by his zeal, he pronounced the word "splenomacrosie," whereon the worthy reporters observe, that none save "a devoted and grateful pupil of Piorry" could descend to such barbarisms. As for the corner-stone of the doctrine, nothing were easier than to root it up. M. Durand estimates the diameter of the spleen at 7 to 7½ centimetres, and regards every organ as engorged which exceeds this dimension. But other writers show, that the spleen may have a diameter of 12 centimetres, without being disordered; and M. Cruveilhier estimates its normal weight as varying from 2 to 8 ounces. These facts of themselves show how impossible it is to draw any correct conclusion from slight variations of the spleen during the course of intermittent fever; but the weakness of the pupil's theory hardly justified the sarcasms of the reporters against the master and his hobby.

ASCITES CURED BY IODINE INJECTIONS.

The two following cases, though not of very recent date, may have the effect of directing attention to a mode of practice, once much in vogue, but now undeservedly neglected.

A young girl, 17 years of age, of feeble constitution, had laboured under ascites for 14 months. The disease appeared to be consequent on a slight pulmonary affection. Diuretics and drastic purgatives had been employed by several medical men without success, when M. Leriche undertook the case. Having punctured the abdomen, he drew off eleven quarts of fluid, and then injected a solution of 1 drachm of iodine and an ounce of the tincture, in 8 ounces of water. Only one-half of the injection could be removed from the cavity of the abdomen on pressure, varied in every direction. On the following night, the patient complained of some pain in the abdomen, which was somewhat tympanitic; she passed urine in abundance; there was no fever, but during the next fortnight the patient seemed feeble, and slept badly. She continued to improve, and was perfectly cured on the twenty-second day after the operation.

The second case was that of a boy, aged 13, affected with abdominal dropsy for many years, brought on by frequent attacks of intermittent fever. A great variety of remedies—tonics, iron, bark, sulphate of quinine, diuretics, purgatives, &c., had been employed without the slightest success. The child's health became so broken down that he was unable to leave his room. Every fortnight it was necessary to puncture the abdomen, and draw off from eight to ten quarts of fluid. On the 27th of April, an injection, composed of one ounce of tincture of iodine to four ounces of water, was thrown into the cavity of the abdomen. No accident whatever supervened, and the cure was permanent.

IRELAND.

[Dublin Correspondence.]

While the three new Irish Colleges are determined to push their way, through "evil report and good report,"—commencing the year with the full tide of Government favour,—the members of the different Societies in Dublin appear not less busy, and the opening of the Royal Irish Academy, the Surgical Society, the Obstetrical Society, &c., portend well for the season just set in. At each of these Societies highly interesting papers from time to time occur, in every way worthy of the high character of the Dublin School. Among these a very practical one, lately, by Arthur Jacob, the eminent anatomist, may be mentioned, on the subject of

GUTTA PERCHA.

This substance, which has been turned into everything, from bas reliefs to candlesticks, Dr. Jacob considers nearly invaluable for the construction of catheters. The ordinary gum-elastic instruments are now, according to Dr. Stapleton, fabricated in the most singular way. Without a bit of gum elastic in their composition, of a woven tissue in the same manner as ordinary cutting whips; this structure, steeped in drying oil, is dried, polished with pumice, and varnished! Left in the bladder, the layers strip off one after another, and it requires little stretch of imagination to conceive, may often form the nucleus of dangerous deposits. Gutta percha, on the contrary, is far more cheap; immersed in urine, as Dr. Jacob found, it suffers no change,—even after a fornight,—and is every other way adapted to the formation of flexible instruments. Gutta percha catheters are used in the Paris hospitals. The brittleness of the new substance seems its chief fault, but this is remedied by leaving it as homogeneous as possible, excluding colouring matter and not exposing it to too much heat.

Dr. Benson exhibited to the Surgical Society of Dublin, a *gutta percha stethoscope*, which he said was more pleasant to the patient and the physician's ear, and quite as good a conductor of sound as the ordinary wooden one.

THE CONTAGIOUSNESS OF CHOLERA

Has lately created some discussion in Ireland, many very striking facts having been adduced by Dr. Donovan, of Skibbereen, one of the ablest physicians in the south, as to the certainty of the disease being contagious; on closer examination of the cases, however, many of them must be mere coincidences; others, it is not difficult to account for by the ordinary defects of sanitary arrangements, in a place like Skibbereen, too, where such frightful destitution existing, the number of persons *likely to be attacked* must be very great, which will still complicate the question. Cholera, Donovan thinks not likely to occur a second time in the same individual. The fact of Medical men, nurses, &c., not being attacked, he ascribes to the preliminary diarrhœa being always in them watched and checked. In the north, at Belfast, the question, too, has been entertained, with almost similar results.

HOT-BLAST FURNACE.

At Belfast, Dr. Stevelly has read an instructive paper on the hot-blast furnace, and, among other things, stated the appalling fact, that of the men employed at this trying work, especially the "puddling furnace," not one ever lived beyond twenty-eight years of age.

LAW OF MORTALITY IN PHTHISIS.

In this disease, in which the mortality is almost equally formidable, Dr. Duncan has of late shown, that some singular facts obtain; males are more liable to phthisis *in cities*; females *in the country*. It is known, that those attacked at Sheffield of "grinder's rot," or "grinder's asthma," are all men, and die before they reach thirty-two years of age. Stone-masons, miners, coal-heavers, flax-dressers, and many other male occupations, also, come into the same category. The passions and the mind Dr. Duncan represents as having more to do with the origin of phthisis than is usually allowed; hence, in a *whole* country, he says, England or Ireland, for instance, the preponderance is at the side of the weaker sex. Mr. Farr long since stated the fact, and ascribed it to tight-lacing, very properly remarking, "Girls have no more need of artificial bones than boys." Dr. Duncan, however, thinks this has little to do with the matter. Exposure of the chest, confinement to the house, deprivation of the light and heat of the sun, also alluded to by the Registrar-General, Dr. Duncan considers of less moment than the moral emotions.

SIMULATED PERICARDITIS.

A rather singular case of this disease has been met by Dr. Hudson, of Navan, and may be worthy of recollection to the practitioner. All the usual signs of pericarditis present, with this membrane, on necroscopic examination, quite and entirely healthy. The friction sound, during life, was more than usually distinct. Even when the respiratory movements were stopped, the man had oppression of the chest, and many of the symptoms that ordinarinarily attend pericarditis,—so much so as to be treated for this disease. The affection he was labouring under being emphysema of the anterior mediastinum, of which no history could be obtained; the pericardium quite sound.

CHLOROFORM IN OBSTETRIC PRACTICE

Has recently gained many adherents in Ireland. A Report was read at the Obstetric Society some time since by Dr. Denham, of a highly satisfactory character; the pains are diminished in force, frequency, and duration; the muscles of animal life are those first affected; the pupils remain natural during the first stage of its effects; but, when full asthenia is produced, they become dilated; the vagina and os externum also become sensibly relaxed. It has never influenced the infant.

BELFAST COLLEGE.

The Professors of Medical Jurisprudence (Professors Hodges and Molyneaux) have opened their class at this College, by an interesting "Introductory," placing this science higher than the ordinary one of healing. The Lecturer descanted at considerable length on the value of medico-legal studies. Some very apposite cases were cited, especially that of a man named Shally, charged with attempt to poison. An adequate inducement to the act was first proved. The prosecutrix swore the prisoner had given her tarts with arsenic. The Medical man, however, was struck with the fact, that the taste she described was not that of arsenic. The action of the tarts was not as quick as it ought to have been; her appearance did not correspond. The evidence, however, was corroborated, and the man on the point of being hanged. By a proper knowledge of chemical analysis, it was now found, by comparing the residue of the pie, that she should have taken ten grains; *the vomited matters contained fifteen*. The prisoner was at once dismissed; the prosecutrix after confessing the whole story. Some other cases as striking were noticed, and the immense value of this department of the Physician's education fully entered into.

SELECTIONS FROM FOREIGN JOURNALS.

CHANGES IN THE QUANTITY OF ALBUMEN IN THE BLOOD.

The following conclusions regarding the variations of the albumen are given by M. A. Becquerel, the son of the well-known physician, in a memoir lately read at the Academie des Sciences. In the blood, the mean quantity of albumen is 80 parts per 1000; the variations from 75 to 85. The quantity diminishes in persons insufficiently fed; in many cases of chronic disease; in persons who have been much bled, or in whom there have been losses of other liquids, as in dropsies, &c. In "simple continued fever," the albumen remains at its usual figure; in plethora, sometimes normal, sometimes decreased; in erysipelas of the face with fever, decreased; in pneumonia, much decreased after the second day; in acute pleurisy and bronchitis, decreased to a less degree; in pulmonary emphysema decreased during the access of dyspnœa; in disease of the heart unchanged, unless there is dropsy, when it diminishes; in Bright's disease diminished, ap-

parently by the abundant dropsy, and not by the actual loss through the kidneys. M. A. Becquerel describes also a polariscope founded on the extent to which the albuminous liquid rotates to the left the ray of light.—(*L'Un. Med.* Nov. 29).

ETIOLOGY OF TYPHOID FEVER.

M. Chomel has lately been delivering some clinical lectures on the disease which he has already so admirably described. We abstract from an account of these lectures in *L'Union Médicale*, the opinions of the Lecturer on the cause of typhoid fever. He (M. Chomel) believes that physicians have in general made a veritable romance of the causes of diseases, more often basing them on a pre-conceived opinion, than on the simple observation of nature. With regard to many diseases, the causes are hardly yet recognised. With regard to others, the cause is perfectly known by its effects, although its principle and intimate nature are unknown. Such effects are the diseases known as small-pox, measles, scarlatina, syphilis, glanders, and marsh fevers, which all arise from specific causes. Is typhoid fever to be approximated to those diseases—is there, in fact, a virus? This seems almost certain. Connected with this question, the question of the contagion of typhoid fever may be examined. Two species of contagious viri may be admitted, the one indigenous, the other exotic. The exotic poisons are those which cannot arise spontaneously in a country; thus the variolous and morbillous poisons do not spontaneously arise in Europe, but have been brought to us from without. Typhoid fever is on the contrary an European malady; it is indigenous; it can arise spontaneously, but also it can, perhaps, be propagated by contagion. The contagion can be judged only by facts negative or positive. Among the negative facts may be mentioned, the small number of those visiting the sick who are attacked; the rarity with which patients are able to state that they have been in the vicinity of diseased individuals. Also there is little doubt, that few persons entering into an hospital for another disease, take typhoid fever from such cases as happen to be there at the time. During nineteen years that M. Chomel has been physician to the Hotel Dieu, there have been admitted yearly into his clinique from 600 to 800 persons, and yet there have been only four cases of persons who have contracted typhoid fever in the wards. On the other hand, exceptions may be taken to the negative facts, while there are certain positive facts which speak strongly for contagion. Thus the immunity of visiters may be partly explained by the fact, that many have previously suffered from the disease, for typhoid fever is a very common disease from which few persons escape. Then, in many cases, typhoid fever does seem to transmit itself from person to person. M. Chomel has often seen one, two, or three persons of the same family fall sick after nursing one of their relations; the father and the mother, on account of their age, are rarely attacked; the brother and sister are often so; and what is remarkable, the disease in them often presents a great similarity. Again, nurses are much more liable than other persons. "*Les sœurs paient le tribut*," is their common expression. The rule is, that nurses are attacked; to escape, is the exception. Students of medicine are also very liable. The transmission of typhoid fever can hardly be traced in a great city like Paris, but neither can that of small-pox; indeed, there are in Paris physicians, who, for this reason believe, that small pox can arise spontaneously. In the country, however, the transmission of typhoid fever can be often followed, as has been perfectly done by M. Bretonneau, who has seen the disease carried from one village to another, and propagated gradually among those about the sick person.

From all these facts it results, that if the contagion of typhoid fever is not demonstrated, it is yet very probable. Yet this contagion is feeble, and, therefore, in order that there shall be transmission, certain special and particular conditions are demanded.

M. Chomel remarks, that typhoid fever, like smallpox or measles, attacks only once during life; it resembles these diseases also, by presenting an eruption as one of its most constant symptoms; but as there can be variola sine variolis, morbilla sine morbillis, so also can there be typhoid fever without rose spots. In typhoid fever, as in other contagious diseases, the intensity of the disease bears no necessary relation to the anatomical signs; persons may die from the extreme intensity of disease before the intestinal lesions appear. Only the malady itself, and not its local manifestations, can explain the march and termination of the symptoms. This is the case with all contagious diseases, and marks a great difference between them and those affections, as pneumonia or other inflammations, which do not arise from specific viri. (*L'Un. Méd.*, Dec. 18.)

ANATOMICAL ELEMENTS IN THE MEDULLARY CANALS OF BONE.

M. Robin describes, in the medullary canals of short, flat, and long bones, besides adipose tissue, vessels, and a fine granular matter, a special kind of cell which he calls "medullary cells," because they are proper to the medullary tissue. They are spherical, or slightly polyhedral, have a diameter of from ·015 to ·018 of a millimetre, are transparent, with defined borders, and enclose a transparent spherical nucleus, which has a diameter of from ·006 to ·007 millimetre. Between the nucleus and the cell wall are molecular granules in variable quantity. These cells are more abundant in young than old persons. Another anatomical element not before described is of more importance, as sometimes forming tumours of bone. Some tumours considered as cancerous by pathologists, possess no cancer cells, but a special element characterized by large patches or flattened lamellæ, sometimes polygonal, sometimes spherical, having a diameter of from ·05 to ·08 of a millimetre. In these patches are from six to ten nuclei, contained in the thickness of the patch. These bodies are also normal elements, and can be found in the medullary tissues of healthy bone, but are much less numerous than the cells above described; they are also more abundant in the bones of young persons than in those of adults or the aged.—(*Gazette Med.*, Dec. 22.)

INFLUENCE OF GALVANISM ON PARALYSED MUSCLES.

In a paper lately sent by M. Duchenne to the Academie des Sciences are some important observations on this point. Paralysis of the upper extremity is divided into two kinds; one in which contractility and electro-muscular sensibility (a) are diminished or abolished as in saturnine palsy, palsy from diseased spinal cord or derivative nerves, and one in which the contractility is always intact, while the electro-muscular sensation may be augmented, may be normal, or may be diminished. This occurs in cerebral, rheumatic, and hysterical palsies. With regard, especially, to cerebral palsies, M. Duchenne states, that when contraction is excited with the most feeble current, the contractility of the paralysed muscles appears sometimes greater than that of the non-paralysed. But this difference is so trifling as to be without value, and to be, indeed, not greater than occurs often in a state of health between different muscles. To be able to say, that the excitability is augmented, the difference should be much greater than it really is. The results obtained by Dr. Marshall Hall are not confirmed by these experiments.—(*Gaz. Méd.*, Dec. 8.)

FUNCTIONS OF THE PNEUMOGASTRIC NERVES.

M. Longet, in an able Paper in the *Archives Générales*, arrives at the following conclusions:—

1. From its origin to its superior ganglion the vagus is a purely sensitive nerve.

2. The excitation of the terminal fibres of the vagus produces reflex movements, which assist in accomplishing digestion, circulation, and respiration. These actions can, however, go on without it.

3. Below its superior ganglion the vagus is a mixed nerve; a voluntary motor influence can be excited through the medium of the fibres it gains from the spinal accessory, the facial, the hypoglossal, and the first and second cervical. The vagus acquires an involuntary motor power from the branches it receives from the anterior cervical, and first five or six dorsal branches, which fibres traverse the sympathetic before reaching it.

4. The means of innervation are multiplied on account of the physiological importance of the nerve.

5. The branch of the accessory presides over the vocal movements of the larynx, and is to the vagus what its lesser portion is to the trigeminus.—*Arch. Gén.* for Nov.

(a) By the term "electro-muscular sensibility," Duchenne means the sensation experienced by the patient when muscles are galvanised.

ETHER AND CHLOROFORM.

Steam has brought us within a few days of New York, and among the sea of communications with which we are deluged, we find sundry lucubrations of our medical brethren in the New World. The American schools, if not remarkable as yet for any great discovery but that of ether in surgical operations, are not wanting in zeal and anxiety for the advancement of General Medical Science. We have room but for one or two excerpts.

We are sorry to see the old dispute between Morton and Jackson still occupying the minds of their very good-natured friends, when all the world has settled the honour of the ether discovery on the former. A discussion has been also going on between Professors Meigs, of Philadelphia, and Simpson, as to the use of anæsthetics in midwifery. The Edinburgh Professor defending their trial as totally without danger, Professor Meigs, on the contrary, says, "he should sit in ashes" all his life, if one of his patients sunk under the experiment an attempt, as he styles it, to "abrogate one of the general conditions of man," —query, woman. At which Dr. Simpson invites him to the Baltimore Railway and intimates, that if his doctrine be true, every man, woman, and child there should walk and not ride, it being clearly a plan to "abrogate," &c., &c., to go by steam. In 1840, one humdred persons were poisoned by opium in England; if so, and Dr. Meig's line of argument be adopted, we should be deprived of one of our most valued medicines. Dr. Simpson looks upon his American brethren as rather "slow," and tells a story of Lord Campbell once being three nights and two days going from Edinburgh to London,—now done in twelve hours. Nay, His Lordship was advised to stop half way for fear of apoplexy, from the frightful rapidity of the mail post of those days!

GUN COTTON.

Among some new discoveries at the other side of the Atlantic, is that of a substance analogous to gun cotton, which promises to play an important part in the treatment of nervous diseases. Glycerine (we are glad some use has been found for it) is poured on the acids in place of cotton. An oily residuum is the result, which seems to act very powerfully on the brain—*producing intense headache.*

A SPECIFIC IN CHORDEE

Has been found, according to American journals, in Lupulin, which may be worthy of trial in that affection. Dr. Page, of the Philadelphia Hospital, has found it of great value. He gives it in doses of from five to ten grains.

MECHANISM OF THE VALVES OF THE HEART.

Some views of Hamernik, of Prague, on the mechanism by which the valves of the heart are closed, and by which the sounds are produced, have been corroborated in America, agreeing generally in the views of Baumgarten. Dr. Hamernik's new ideas may be thus summed up:—He believes it possible that one or more systoles of the ventricles, unpreceded by any auricular action, may take place. In chronic asthma and pneumonia, the blood, powerfully propelled, may distend the auricles that they become unable to contract fully on their contents, in which circumstances he thinks two or more systoles are not uncommon. The division by the older anatomists of the ventricles into two portions, one auricular, the other arterious, he considers true. In the former, a current of blood exists until the closing of the valves; in the latter, a current established by the ventricular systole, continuous with that of the artery; simple roughness of the mitral valve will not give rise to murmur. The first sound he considers as occasioned by the vibration of the tense auriculo-ventricular; the second by the impulse on the semi-lunar valves already shut,—not their closure. A double, or even treble sound is sometimes heard over the ventricles, but this, he

says, depends on a double vibration; as a sail of a ship struck by wind emits several sounds.

As the small specific gravity of the valves facilitates their closure, anything which can render them specifically heavier, as fibrinous deposits, will interfere with this. On a similar principle Hamernik is inclined to explain the *bruit* in chlorotic patients. We feel, however, we can scarcely go along with him. Here he would seem to think, of course, that the blood gets lighter, unable to buoy up the valves.

ERYSIPELAS OF THE LUNGS.

In the practiceof surgery, five remarkable cases in one month of *erysipelas* attacking the "mucous membrane of the lungs," in the practice of Dr. Steiner, of Texas, are given—the chink of the glottis closed up by effusion. In some cases attended even with erosion—more or less inflammation of a somewhat unusual character of the bronchial tubes, were the chief distinctive marks, independent of the usual ones of erysipelas. All the cases were fatal; and had come into the hospital for other complaints.

ANALYSIS OF COD LIVER OIL.

Analyses of three kinds of *cod-liver oil* have been made in America, which seem to corroborate the opinion that "light brown" is best, containing more iodine, and which we are inclined to look on as not less of value in this excellent medicine—*phosphorus*. Dr. Williams's experience, which has been the chief cause of its immense use in America, has been very remarkable. He prescribed it at the time of publishing his results in over 400 cases of tubercles of the lungs; in 100 cases of incipient softening, its effects were decided and lasting; and in 206 out of 234 marked and unequivocal improvement almost immediately followed its exhibition. Nay, among the appalling ravages of the third stage of the disease, in over 60 cases he found it of very great value. Its mode of action is, of course, open to much speculation. In an analysis of the blood in an individual taking the oil, the animal matters were found nearly doubled; the fibrin, usually high in phthisis, was reduced. There seems some reason, then, for, supposing that, in addition to this healthy nutritive matter, (a sort of magazine to the system,) that the oil supplies certain fat molecules, which appear essential to forming the nucleoli of the primary cells of ordinary tissues—fat, according to Ascherson, having the physiological power of coagulating albumen around it.

QUANTITY OF BLOOD IN ANIMALS.

An ingenious method of *testing the quantity of blood in animals* has been tried in America by Dr. Blake, of St. Louis. Injecting a certain weighed quantity of a salt into the veins, and a little after testing the blood when the salt had got thoroughly mixed in the circulation, the quantity of blood in a dog, he says, does not amount to more than one-ninth or one-eighth the weight of the animal,—an estimate much lower than that generally received.

AMERICAN STATISTICS OF CHOLERA.

On the subject of Cholera we have, of course, innumerable suggestions. We are not aware, however, that they differ materially from what we have been taught in the Old World.

In America, as well as in this country, the rate of mortality is about once and a half wha it was in 1832; the same classes of people attacked; the disease infectious rather than contagious; haunting low and badly-drained localities; evidently originating in some epidemic influence, and spreading according to the nature of the locality; the circulating current thoroughly disorganized; the best treatment that directed to the disease in its early stages, and to the support of the normal functions of the capillary system; the signs on dissection, everything considered, actually negative. In America, chloroform and naphtha have been found of great use in the treatment, acting on the capillaries and keeping off collapse even under the most unfavourable circumstances.

YARMOUTH HOSPITAL.—The funds of this hospital have been increased by a donation, amounting to nearly 36*l.*, the profits of a hymn-book, the copyright of which has been presented to that Institution.

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Our Subscribers will find in this Number the remainder of the Index to Vol. XX., which should be cut out and inserted in its proper place.

THE MEDICAL TIMES.

SATURDAY, JANUARY 12, 1850.

THE Council of the College of Surgeons are greatly agitated upon the subject of a reform of the Corporation. It is probable that, on the 10th inst., Mr. Guthrie may endeavour to introduce more important questions for discussion than are included in the Resolution recently passed by the Council. We have already exhibited the extent and bearing of Mr. Guthrie's projects, and we do not consider that, even should they be adopted by the Council, there would be much chance of carrying them into effect. The principal design which they betray is to yield the appearance of reform, but to withhold the reality,—in fact, to deceive the just expectations of the Profession.

Mr. Guthrie's plan would give increased patronage to the Council by endowing them with the privilege of appointing numerous examiners, but would not confer a single privilege upon the members. It would aggrandise the governing body of the College, but would leave the members as homeless, unfranchised, and unprotected as they now are. Theoretically, the scheme is bad, as it tends to degrade the science of medicine—a result that might be expected, since the Council of the College have ever made it their barbarous boast that "they knew nothing of physic;" practically, the alteration would be a matter of indifference to the Members, who could reap no advantage from the change. We can see nothing to admire in the proposition of Mr. Guthrie, except the adroitness with which it is attempted to draw off the Members, and the Profession at large, from the pursuit of their inalienable rights.

Mr. Bottomley's propositions will also come under the consideration of the Council on the 10th inst.;—their fate it is not difficult to foresee. These propositions go so far as to confirm the two grades of Fellows and Members that now exist in the College;—a temporizing with wrong, which, whilst it humbles the injured Members, vindicates no just principle. If it mean anything, it is simply this: that the contest is not for honest principles, but for private interests, and especially the immediate interests of a few. Either the institution of the order of Fellows was wrong in principle, or it was not. Mr. Bottomley admits the wisdom of the principle, but is dissatisfied with its application. It is perfectly clear, that the attempt to carry out an exclusive principle of this kind at any time would act injuriously upon existing Members, and excite disaffection. No human foresight could prevent it; and the only true battle-ground is, therefore, against the principle of the Fellowship itself. The condescending spirit in which Mr. Bottomley proposes to grant to the Members a vote in the election of the Fellows will not be sufficiently appreciated. This part of the scheme is a mere puerility, and the plan altogether is much too complicated for the regulation of so homogeneous a body as the Members of the College of Surgeons. This partial exercise of an undoubted right would be a positive and strongly-marked badge of abasement which the Members would immediately resent. They demand a direct vote in the election of the Council; and to attempt to defraud them of this right by giving them the privilege of electing an intermediate elective body, as numerous probably as themselves, is one of those chimerical notions invented by the crazy imagination of some closet-politician, who, infatuated with the beauty of a system, loses all sight of individual rights. Far better would it be, that every Member acquired at the end of ten years an absolute right to the Fellowship, than that he should be elected to it at that time by the body of Members. The scheme proposed by Mr. Bottomley would be absurd, if not impracticable in operation; and, if it had any real force at all, its tendency would be, to bring the Fellowship within very narrow limits. Such a proposition is hostile to a just and liberal reform of the College, and will not gain many supporters. Simplicity is desirable in all projects intended for practical operation.

THE BOARD OF HEALTH AND ITS INSPECTORS.

THE people of England are reported to be a generous and a grateful people; and measured by the lofty standard of their voluntary benevolence, no nation has ever compassed their wide-reaching munificence, or rivaled their exalted sentiments of fraternity and good-will. This is our boast—we call the Black man, brother, and pour our riches into his lap. We contrive numberless schemes for the amelioration of his savage condition—we fill up subscription lists with our guineas, that we may carry to him the alphabet and the Gospel, the beginning and the end of wisdom; and although, sometimes, when we cannot civilise we exterminate, this only proves the excess of our zeal, and the irreclaimable stupidity of the ungrateful subjects of our experimental benevolence. Yes, the English are prodigal of their wealth in the cause of humanity; they have a lively sense of their responsibilities as a people; they are just, too, in their general dealings, and they have a profound horror of ingratitude. They have, withal, a high admiration of successful enterprise, whether in commerce or war. A Hudson can scarcely fathom the depths of their generosity,—and a great military name has been lifted to the steps of the throne by the successive waves of national gratitude. The English have, indeed, a reverence for great exertion; and towards those, from whose sacrifices they have received honour or blessings, their hearts overflow with thankfulness, and their purses with rewards.

Is this truth or flattery? an historical por-

of the blood, and the smoothness of the mucous membrane of the stomach are both commonly present after death from typhus fever. But softening of the mucous membrane of the intestinal canal is very rarely seen to the same extent as in this particular case. There had been no signs to indicate its existence during life; and it is probable that it was in a great measure cadaveric. Peyer's patches, and the mesenteric glands, it is to be observed, were in all respects in their normal state.

Hæmorrhage sometimes takes place into the substance of muscles where no external violence can have occurred. The rectus abdominalis is a frequent seat of the effusion of blood. The following case illustrates this complication.

Case 10.—No history of early symptoms.

Mary B., aged 70, a thin woman, with grey hair, came under observation on the sixth day of disease. No particulars of the symptoms present before her admission into the London Fever Hospital, under the care of Dr. Tweedie, July 21st, 1848, could be obtained. She had resided for some years preceding her admission in Kensington workhouse. Several cases of fever, with mulberry rash, were admitted shortly before from the same locality.

When first seen, on the sixth day of disease, her mind was wandering. She fancied she had been in the hospital three days. There was no headache, she had slept a little. She was deaf. The tongue was dry and brown; the bowels slightly relaxed. There were, however, no abdominal signs; the pulse was only 80. There was slight want of resonance, and very feeble respiratory murmurs over the most depending part of the lungs, the patient lying on her back; the skin was warm and dry. Mulberry rash was well marked. The prostration was so great, that the patient was unable even to turn in bed unassisted. 4 oz. of gin were ordered to be given during the twenty-four hours in divided doses. On the next day the pulse had risen to 120; it was very weak; there was some somnolence; in other respects there was little change; she died at 7. a.m., on the ninth day of disease, apparently from asthenia.

The body was examined *thirty-one hours after death*; the weather being cool; the cadaveric rigidity had almost entirely disappeared; the spots observed during life continued; beneath and extending among the fibres of the left rectus abdominalis muscle was a loosely coagulated dark bloody clot, 2 in. in length, and 1 in. in breadth. It was situated, as above described, midway between the umbilicus and pubis.

The *heart* was flabby; the clots contained in it soft and dark; the lining membrane was stained dusky red; the lungs were deeply congested posteriorly; the mucous membrane of the stomach was smooth and free from rugæ; the consistence, thickness, and colour of the whole gastro-intestinal mucous membrane was normal; Peyer's patches in all particulars healthy; larynx, pharynx, and œsophagus healthy; there was no enlargement of the mesenteric glands. A few small cysts studded the cortical substance of the kidneys; the urinary bladder and uterus were normal in all particulars; the pancreas healthy; the liver very flabby and soft; the spleen somewhat enlarged.

Head.—The pia mater was congested; there was a little subarachnoid effusion of serosity; and the pia mater and arachnoid separated from the cerebral convolutions with abnormal facility. The substance of the encephalon itself appeared healthy in all respects.

This patient, like all affected with typhus fever when they make any mistake as to the duration of time, supposed it lengthened; thus she thought three days had elapsed between her entrance into the hospital and my first seeing her, whereas, really, it was only one day. In addition to the presence of a clot in the substance of the rectus abdominalis muscle, this case illustrates the early period at which death from typhus fever, uncomplicated with local lesion, may ensue. There was nothing found after death to account for the fatal termination. Some congestion of the most depending part of the lung—slight congestion of the pia mater—trifling enlargement of the spleen—and a small quantity of loosely coagulated blood in the substance of a muscle, were all the physical changes established during life which the scalpel enabled us to lay bare. The effect on the solids of the general disease, which latter itself our scalpel could not detect, was manifested by the flabby state of the heart and liver, the early disappearance of the cadaveric rigidity, &c.

In Case 9 an example was afforded of convulsions coincident with an effusion of blood into the cavity of the arachnoid. I shall now detail a case in which that lesion was detected after death, when there had been no symptoms to indicate its presence during life, Case 11; and then I shall narrate a case, No. 13, in which convulsions occurred, but which presented no lesion, excepting some congestion of the brain and its membranes, to account for so serious a symptom; and then Case 14, in which the cerebral spmptoms were very prominent during life, but in which, after death, not the slightest deviation from the normal condition of the encephalon or its membranes could be discovered.

Case 11.—After exposure to the contagion of fever accompanied with mulberry rash.

Ensued—rigors frequently repeated—pain in head and limbs—confined bowels—rapid prostration—hoarseness — deafness — disturbed vision — mental confusion—dry brown tongue—difficult deglutition—quick pulse—cool skin—mulberry rash—extreme difficulty of breathing—death on the 16th day.

Eleven hours after death, persistence of spots—clot in the substance of left rectus abdominalis muscle—clot in the cavity of arachnoid—slight congestion of the posterior part of lungs—softening of the mucous membrane of pharynx—thickening of rima glottidis—pus in larynx—other organs normal.

Mary G., aged 49, a moderately stout woman, subject to constant cough, was admitted into the London Fever Hospital, May 9th, 1848, under the care of Dr. Tweedie. Her daughter left the hospital three weeks before, and Mary G. washed her clothes. She was a native of London.

Present illness began 13 days before her admission with rigors frequently repeated—pains in the head and limbs, and confined bowels. She took to her bed entirely on the second day of disease, because she felt generally ill and extreme weakness. There had been no epistaxis. She had taken before admission several doses of aperient medicine. Hoarseness first made its appearance, her relations stated, on the 9th day of disease.

The following notes of her case were taken on the thirteenth day of disease:—No headache, slight deafness (not deaf till present illness), no delirium, memory defective; complains of seeing strange objects about the wards; she is quite conscious that these objects have no real existence; says she has a most disagreeable taste, and a constant sense of unpleasant odours; there is no flush of the face; she is unable to leave her bed without considerable assistance.

The tongue is brown and dry; she swallows either solids or liquids with considerable difficulty; there is swelling and dusky redness of the tonsils, uvula, and velum pendulum palati; she has passed two stools during the last twenty-four hours; there is neither pain, tenderness, fulness, resonance, nor gurgling of the abdomen; no appetite, no thirst.

She can speak only in a faint, hoarse whisper; no tenderness of the larynx; cough troublesome; some sonorous and mucous râles over both sides of the chest; percussion normal; pulse 120, weak; heart sounds normal; skin cool, covered with mulberry rash; vin. alb. ʒiv., jus. bov. On the fourteenth and fifteenth days there was little change in the local or general symptoms, excepting that the spots were paler somewhat on the fourteenth day, and she was quite unable to protrude her tongue, she passed her stools in bed on the fifteenth day. The muscular movements at the same time were extremely tremulous; the pulse had risen at the latter date to 128, was very weak, and the skin cool. She became very restless during the afternoon of the fifteenth day. Death occurred at 4 a.m., on the sixteenth day. For some hours before the fatal termination the breathing was exceedingly laboured. There were no convulsions, and no coma.

A blister was applied to the throat on the fourteenth day of disease, and at the same time the wine was increased to six ounces in the twenty-four hours. On the fifteenth day four ounces of gin were given, in addition to the wine.

Eleven hours after death the following appearances were observed:—The spots noted during life were still to be detected; there was no emaciation; at least 1½ inches of fat covered the abdominal parietes. Between the left rectus abdominalis muscle and its sheath, anteriorly and posteriorly, and also among the fibres of the muscle, which were at that place softer than elsewhere, was a considerable quantity of loosely coagulated blood. The extent occupied by the clot was about six inches by two inches. It commenced an inch above the pubis.

Head.—The bloody points on the external surface of the dura mater were very numerous. A little bloody serosity escaped on opening the cavity of the arachnoid. On either side, extending from the greater wing of the spheroid bone to the tentorium cerebelli, closely applied to the arachnoid covering the pia mater, and within the cavity of the arachnoid, was a film of coagulated blood of a bright red colour, with spots of a dark venous hue scattered over it at intervals. The difference in colour depended on the difference in the thickness of the clot. There was no trace of any clot in the longitudinal fissure, and no coagulum at the base of the brain. In the meshes of the pia mater was much colourless serosity; and a moderate amount of the same in the lateral ventricles. The bloody points on the cut surface of the cerebrum appeared more numerous than natural. There was increased vascularity of the plexus choroides. The consistence of the cerebral substance was natural.

There was no abnormal congestion of the *pulmonary tissue*. The lining membrane of the bronchial tubes was finely injected; the tubes themselves contained much muco-purulent fluid. The *pericardium* and *heart* were healthy. The clots in the heart were firm.

The mucous membrane of the *pharynx* was of a dirty yellow colour, and so soft that it could be readily removed by the slightest scraping from the subjacent tissue.

Larynx.—The rima glottidis was narrow, the mucous membrane of the whole larynx finely injected, and covered with a layer of purulent fluid. On and above the chordæ vocales was some solid opaque white matter, resembling lymph in physical character.

The *liver* was flabby; the *spleen* small, weighing only 4½ oz., was soft and flabby.

The *pancreas*, *urinary bladder*, and *uterus* were healthy. The *kidneys* contained numerous small cysts in their cortical substance.

The *œsophagus* was normal in appearance.

Stomach.—The whole of the coats of the great cul de sac were so soft that the finger passed through them with the greatest facility. Bluish white bands, from which the mucous membrane had disappeared, extend from the softened portion towards the pylorus. The whole mucous membrane of the stomach was exceedingly soft, but very pale.

Large and small intestines.—The thickness, colour, and consistence of the mucous membrane lining the intestinal canal, as well as the condition of Peyer's patches, were carefully noted. They were healthy in all particulars. The mesenteric glands were in their normal condition.

In this case there was much more blood within the cavity of the arachnoid than in Case 10, and yet there were no convulsions. The softened condition of the substance of the rectus abdominalis, and the presence of a clot of blood in it, are points worthy of attention, as showing the relation between the diseased condition of the solids and fluids generally, and the presence of hæmorrhage into the cavity of the arachnoid. Clots were found on both cerebral hemispheres. The absence of any trace of clot in the longitudinal fissure rendered it probable that the hæmorrhage occurred primarily on the two sides, *i. e.*, that the blood did not pass before coagulation from the one hemisphere to the other. As is common in cases of hæmorrhage into the arachnoidian, no trace of the vessels from which the blood escaped could be detected.

A small quantity of coagulated blood is, as I have before remarked, by no means infrequently found within the cavity of the arachnoid after death from typhus fever. Thus this lesion was discovered to exist in one-seventh of the cases of typhus fever which proved fatal during the progress of that disease analysed by myself in the *Edinburgh Monthly Journal* for October 1849, and my impression is, that such proportion does not very far exceed what the whole of the cases I have examined after death would afford. The quantity of blood, however, I ought to remark, is often very small. I have never seen the slightest trace of hæmorrhage into the *substance of the brain* after typhus fever. Now, intense congestion of the membranes of the brain is frequently, almost constantly, found after death from typhus fever. Congestion of the cerebral substance much more rarely; and when it does occur is infinitely less intense.

This case also illustrates one form of laryngitis, as found in typhus fever, *i. e.*, that form which advances insidiously, and is unattended with those violent symptoms which are consequent on sudden swelling of the submucous tissue of the larynx. The physical obstruction to the entrance of the air was

comparatively trifling. It will be observed, that from the history of the symptoms, as well as from the more advanced stage of the disease of the pharyngeal than of the laryngeal mucous membrane, that the affection commenced, as it usually does, in the pharynx, and then spread down to the larynx. Deafness was noted in this case, as it was in Cases 3, 11, and 12. It is a common symptom in typhus fever. The softening of the stomach was cadaveric, a part of that tendency to softening of the tissues so eminently characteristic of the disease I am here considering. The sonorous râle, and the condition of the bronchial mucous membrane, were probably dependent on the chronic bronchitis, of which it appeared this woman had long been the subject.

Case 13.—Slight rigors, pains in back and abdomen—diarrhœa without medicine—sudden prostration—mental confusion—trifling headache, vertigo—brown and dry tongue—tenderness of abdomen—mulberry rash—convulsions—coma—*death*—persistence of spots—meningeal and cerebral congestion—blood very loosely coagulated—hypertrophy of the heart—other organs healthy.

Thomas B., aged 61, a printer, a thin man, whose previous health had been very good, was received into the London Fever Hospital, May 27th, 1848, on the 8th day of disease, under the care of Dr. Tweedie. He never had a fit of any kind before his admission into the hospital. His illness commenced with slight rigors and pain in the back and abdomen. His bowels were relaxed from the outset and before he took medicine of any kind. He kept his bed on the second day of illness.

On the 9th day of disease the following notes of his case were made:—

He states, when asked, that he has slight headache and some vertigo—he slept but little last night—his mind is somewhat confused. The tongue is dry and brown—the abdomen tender—the bowels much relaxed. He has passed five stools since his admission yesterday—there is no appetite and but little thirst.

The pulse is only 90. With the exception of rather extensive cardiac dulness, there are no abnormal physical chest signs.

The muscular powers are greatly impaired—he is quite unable to leave his bed unassisted, even to reach the closestool. The skin is warm and dry. There is abundant mulberry rash.

During the night he was seized with convulsions, throwing his arms about violently; he appeared at the time unconscious of all going on around him. This fit lasted for about ten minutes. He slept for some time before and after the fit.

When I saw him again on the following morning, *i. e.*, the 10th day of disease, he said he was free from headache—his mind was rather more confused than on the 9th day—the conjunctiva was injected, the pupils small—the urine was passed into the bed. On the following day he had a second attack of convulsions, which lasted, however, but a very few minutes. During this attack his limbs became very rigid and he foamed at the mouth, and after it he slept for half an hour. He was otherwise very wakeful and occasionally delirious. On the 11th day he continued watchful and delirious—there were frequent twitchings of the muscles of the face—the urine and the stools were passed into bed—the pulse was scarcely perceptible. He died at 11 a.m., on the 12th day of disease. He was comatose for some hours before death.

The body was examined twenty-seven hours after death.—The spots marked during life continued visible.

Head.—The dura mater was considerably congested. There was a little fluid in the cavity of the arachnoid, and a small quantity infiltrated the meshes of the pia mater. The arachnoid was rather opaque. The pia mater minutely injected over the whole surface of the brain. Numerous but minute bloody points studded the cut surface of the grey and white matter of the cerebrum. The consistence of the brain was natural. The lateral ventricles were moderately distended with colourless fluid. The vessels of the plexus choroides were loaded with blood.

Chest.—With the exception of a very small soft black clot in the right auricle and ventricle, and a still smaller clot in the left auricle and ventricle, the blood was fluid throughout the body.

Pericardium healthy.

Heart somewhat enlarged and hypertrophied.

Larynx—bronchial tubes—bronchial glands and *lungs* healthy in appearance.

Pharynx and œsophagus normal.

Stomach.—With the exception of a few rugæ, along the greater curvature, and trifling mammillation near the pylorus, the mucous membrane of the stomach was smooth; the mucous membrane was posteriorly of reddish colour, anteriorly a darker red, and along the greater curvature of a vermillion hue; the redness was punctiform and capillary; the deeper red parts were slightly thickened and firmer than the surrounding; there was no softening of any part of the lining membrane; the larger vessels of the posterior wall of the organ were moderately full of blood; none were visible on the anterior surface of the organ.

The *mesenteric glands* and *intestines* were healthy in colour, thickness, and consistence.

The *pancreas, liver, kidneys, and urinary bladder*, were normal; the *gall bladder* contained some dark green bile; the *spleen* was dark and firm, and weighed 7½ oz.

Thus, with the exception of the congestion of the brain, by no means greater than in many cases when no convulsions occurred, there was no lesion to account for that symptom. The patient died at an early period of the disease, *i. e.* on the 12th day, and no local complication of importance was revealed by the scalpel. The convulsions and death were probably the result of the same cause, the diseased condition of the blood. I would wish particularly to direct the reader's attention to the fact, that diarrhœa, pain ain the abdomen, and tenderness of the belly, were among the earliest and most prominent symptoms, and yet there was no lesion of Peyer's patches, The tenderness, probably, depended on the condition of the gastric mucous membrane. I shall have, hereafter, to detail cases, in which constipation was a prominent symptom, and yet extensive ulceration of the agminated glands was detected after death. So that, *by themselves*, pain in the abdomen and diarrhœa, even when present in fever, are by no means *diagnostic* of lesion of Peyer's patches.

Case 14.—George C., aged 58, a stout, fair-complexioned man, was admitted into the London Fever Hospital, under the care of Dr. Tweedie, July 4th, 1848, labouring under typhus fever, accompanied with the diagnostic mulberry-rash. This man's wife and children were patients in the hospital some weeks before; they, too, laboured under typhus fever with mulberry rash. From his admission till about the fourteenth day of disease, when the following notes of his condition were taken, he was *violently* delirious:—"He sleeps very much—when roused is very delirious; he cannot be made to take his medicine; will not protrude his tongue; is unable to leave his bed unassisted; he has passed two stools during the last twenty-four hours; his pulse, which, up to this date, has not exceeded 96, is 108, and for the first time irregular; on the following day it reached 120 in the minute; it continued irregular, and, during the last twenty-four hours of life, was intermitting. On the fifteenth day, strabismus was observed for the first time; his eyes were both drawn upwards and inwards; his wife was struck by his appearance, and remarked spontaneously, that she had never seen him squint before his present illness; the spots grew darker as the disease advanced; coma preceded death for many hours; he died on about the eighteenth day of disease."

The following was the condition of the organs discovered, on an examination of the body twenty-four hours after death:—

There was no opacity of the arachnoid; a little fluid only in the cavity of that membrane; a little colourless serosity in the meshes of the pia mater; slight congestion of the latter; the arachnoid and pia mater separate in one mass from the surface of the convolutions, without carrying away any of the cerebral substance; a little transparent serosity in the ventricles; there were a few more red points than common in the white substance of the brain; the consistence of that organ was perfectly normal.

With the exception of some red serosity in the pericardium, which microscopic examination proved to contain no blood corpuscles,—a very flabby condition of the heart, the lining membrane of which was stained dusky red,—a nearly fluid condition of the blood throughout the body,—a limited amount of consolidation of the pulmonary tissue of the left lung from central pneumonia,—flabby liver,—dark thick bile,—and smoothness of the lining membrane of the stomach,—common after death from typhus fever, as I have before pointed out, the whole of the organs were in a normal state.

I have narrated the above scanty particulars of this case, in order that the reader may have another illustration of the frequent presence of what are called head-symptoms,—violent delirium, squinting, and coma,—and yet after death-examination be unable to afford the slightest explanation of the morbid vital phenomena, by the demonstration of any change of structure within the cranium. An irregular or intermitting pulse is by no means rare in typhus fever, when no old disease of that organ is detected after death.

I do not give a case illustrative of the pathological appearances observed within the cranium after death from typhus fever, complicated with inflammation of the brain or its membrane, for this reason, because *I have never made an examination, after death, of a case of typhus fever, in which such appearances were present.* The assertion that the symptoms of typhus fever are due to inflammation of the brain, rests on as untenable grounds as that of the same disease in gastro-enteritis.

COMA VIGIL.

Case 15.—Maria W, aged 52, was first seen on the ninth day of disease; at that time the symptoms of typhus fever were present. She slept much, and on the tenth day almost constantly, night and day. Somnolence continued till about the middle of the thirteenth day, gradually, however, becoming less constant. From the time of the visit, on the thirteenth day, till her death, at 1 a.m. on the fifteenth day, she never closed her eyes. On the fourteenth day, the following note was made:—She lies constantly on her back; eyes open; has not closed them since the visit yesterday; cannot be made to open her mouth, or to attempt to protrude her tongue; gives no sign of consciousness when spoken to. The skin is cool and sweating profusely; the spots are darker than on admission; there are no sudamina.

The body was examined twenty-two hours after death. There was some colourless serosity in the cavity of the arachnoid; a little similar fluid in the meshes of the pia mater; a moderate quantity in the ventricles. The pia mater, arachnoid, and cerebral substance, appeared healthy in colour and consistence.

Thus, no condition of the encephalon was detected, to account for the peculiar symptom above described.

I have seen one person only recover from this state, and in that case the coma vigil was not complete.

Case 16.—George P., aged 30, a surgeon, was received into the London Fever Hospital, June 2nd, 1849, on the eighth day of disease, under the care of Dr. Tweedie. He had well-marked and very severe typhus fever. At the time of his admission the mulberry rash was very abundant. On the sixteenth day the following note was made:—

"He has been since last evening in his present condition. Is now lying on his back, his eyes open, but he is apparently unconscious of all going on around him. He cannot be made to protrude his tongue, or even to make any effort to do so; yet he swallows a little fluid when poured into his mouth. His pupil acts very little by the aid of a candle. Pulse 132, very weak. Urinary bladder distended; urine passing into the bed. The mulberry rash is well marked. A blister was applied to his forehead, and on the following day the pulse had fallen to 108. He had some sleep; assisted himself to drink; protruded his tongue fully when bidden; and the spots were much paler. From this time he rapidly recovered."

It will be observed, that the condition described as having existed in the two last described cases was very different from somnolence or ordinary coma. It was the opposite of that described as coma vigil by Chomel and some other writers, *i. e.*, a condition in which the patient sleeps as much, or even more than in health, and yet declares that he has never closed his eyes.

PREGNANCY is by no means a necessarily fatal complication of typhus fever; nor do pregnant women necessarily miscarry, as the two following cases, 17 and 18, prove.

Case 17.—Mary Ann G., aged 23, a stout, well-made, married woman, was received into the London Fever Hospital, August 18, 1847, on the ninth day of disease, under the care of Dr. Tweedie. Her brother also suffering from typhus fever, was admitted with her. This woman was between seven and eight months gone with child. She had well-marked severe typhus fever. The mulberry rash was copious and characteristic. Her pulse on the tenth day of disease was 140, and on the twelfth day 150; the tongue dry and brown, and the spots dark. On the fifteenth day of disease the pulse had fallen to 100; the tongue was moist, and the spots were fading. Vomiting

Daniell states, that Pleuritis, Pneumonia, Phthisis Pulmonalis, and other pulmonary diseases, as well as Dysentery, Diarrhœa, and numerous abdominal affections, are common during the cold, rainy months. Of the above, Phthisis and Dysentery appear to be by far the most fatal complaints in low marshy localities. Teniæ and ascarides are the intestinal worms most frequently seen. The frequency of hepatitis, induration, and other organic diseases of the liver is attributed by our Author to the immoderate use of stimulants. Serious cerebral, as well as maniacal affections, are rarely seen. Calculous diseases are unknown. Elephantiasis appears to be limited to slaves imported from Soudan.

Charms and medicine-bags, fabricated by the *e bo dibia* or doctors, and held in the hand, or attached to the neck by copper wires, are the means relied on as preventives against both sickness and danger. Cupping appears to be the favourite remedy for all deep-seated pains. Three incisions, eight lines apart, and about one inch in length, are made by a sharp razor or knife. A small calabash is then applied, the air being exhausted by burning paper or cotton. The wounds are dressed with a kind of soot. The green pods of *capsicum fructescens*, pounded into a pulp, are used as powerful counter-irritants.

Both males and females are ordinarily circumcised. It is generally performed on the males in early infancy; but in Dahomey the time of submitting to the operation is left to the boys themselves.

When applied to women the expression circumcision signifies "the excision of the clitoris, and other organic structures connected with it."

It appears that the parts actually excised, however, varies in different countries.

The operation may, according to Mr. Daniel, consist of either—1. Simple excision of the clitoris; 2. Excision of the nymphæ; 3. Excision of both nymphæ and clitoris; or 4. Excision of a portion of the labia pudendi, with either or all of the preceding structures.

It appears to be a remnant of some mysterious religious orgies.

The first of these operations appears to be simply a custom of these countries, performed without reference to any special end. It is effected before puberty, and is unattended by dangerous symptoms. An old female is the operator.

Our Author thus describes this very curious rite, as performed in his own presence, while in the Calabar river:—

"The girl having been placed on the knees of a woman, with the legs apart, the clitoris was diligently sought out, (for in this, as in other subjects of tender age, from imperfect development, it was sometimes difficult of detection,) and, upon discovery, was seized forceps-like by two pieces of bamboo or palm sticks, gently drawn forth, and severed by means of a sharp razor. The hæmorrhage was rather copious, but it was suffered to exhaust itself."

The second operation is resorted to only in cases of hypertrophy of the nymphæ.

The third is frequently adopted by woman as a means of "ingratiating herself into the favour of her liege master."

The fourth appears to be intended to "produce an artificial impediment in the vagina, to prevent sexual intercourse, in order not to impair the value of slaves."

With the following extract, interesting physiologically, we must close our notice of this work, assurring our readers, that they will find it abound in information respecting these still little known regions evidently the result of personal observation:—

"Parturition in the negro female has been generally represented to be an easy process, and not attended with much danger; such, however, is not invariably the case. Inquiries among the different tribes have amply satisfied me, that in many instances the parturient woman has perished from the want of a little timely assistance in those complex and preternatural labours which have been heretofore supposed to be of less frequency among them, than in the females of more civilised communities. Puberty in these regions commences about the age of eleven or twelve, and sometimes much earlier."

We hope, that in the work Mr. Daniell promises us on the "Endemic Diseases of the Coast of Guinea," he will be a little more specific in his description than the majority of writers, and favour us with a few well-told cases, rather than loose general sketches.

The Use of the Blowpipe, in the Qualitative and Quantitative Examination of Minerals, Ores, Furnace Products, and other Metallic Combinations. By Professor Plattner, Assay Master at the Royal Freyberg Smelting Works. Edited with Emendations by Dr. Sheridan Muspratt, Professor of the Liverpool College of Chemistry, &c. Second Edition, revised and enlarged., 8vo. Pp. 401. Taylor, Walton, and Maberly.

The Preface of this Work, written by Liebig concise as it is, sufficiently attests the value of the original, and the fidelity and ability of the translation. "The blowpipe," writes that illustrious man, "is of the highest advantage to the chemist, geologist, and mineralogist, as a means of ascertaining, with the greatest accuracy, in a few minutes, all the constituents of a mineral. Professor Plattner's work is the simplest and best adapted for this purpose.

Professor Plattner himself states, "Dr. Sheridan Muspratt has published in English, my 'Probirkunst nuit dem Löthrohre,' and, really, with such circumspection and profound knowledge of the subject, that I deem it my bounden duty to tender him my heart-felt acknowledgments." A second English edition of so elaborate and highly practical a work, is a high tribute to its intrinsic value, and to the ability and judgment of Dr. Muspratt.

The work consists of a description of the blowpipe, of the combustible material of the flame, oxidating and reducing, with the mode of using the instrument. Then follow excellent practical accounts of the various pieces of apparatus required in the operation. The whole of this portion of the book is illustrated by well-executed woodcuts, which Dr. Muspratt has judiciously incorporated with the work itself, instead of, as in the original, putting them together at the end. The three principal re-agents indispensable in examination with the blowpipe, are, carbonate of soda, biborate of soda, or borax, and phosphate of soda and ammonia, or microcosmic salt. The mode of testing the purity of these salts, as well as various other re-agents, useful in facilitating fusion, &c., is given with all the precision and conciseness necessary in a practical treatise. The above constitute the first section of the work.

In the second section, qualitative analysis with the blow-pipe is considered. Each alkali, earth, and metal being separately described; and a list of its compounds and their composition subjoined. This list is followed by an account of the mode to be adopted in detecting the body by the aid of the blow-pipe in each of those compounds.

The method of determining the quantity of silver, gold, copper, lead, and tin in ores, minerals, &c. occupy the third section.

While in an appendix is a chapter on the behaviour of urinary calculi before the blow-pipe.

We regard the fact of this excellent work having passed through two English editions as a convincing proof of the great ardour with which chemical researches are at the present moment carried on. It would be obviously out of place for us to give a more lengthened examination of the work before us. Its eminently practical character, and indisputable usefulness, must place it in the hands of every real student of chemistry. The thanks of the community are due to Dr. Muspratt for the strenuous efforts he made to establish a College of Chemistry at Liverpool. For a knowledge of practical chemistry cannot be disseminated among our agriculturists, merchants, and manufacturers, without the country at large partaking of the benefit. We rejoice that success has crowned his exertions. Ere, however, we conclude this brief notice of the labours of Dr. Muspratt, we must advert to one fact. The Apothecaries' Company refuse to receive Dr. Muspratt's certificates. He is recognised by the London University, but repudiated by the Hall; and that, while the latter receives certificates from men, who, as chemists, and with refereuce to their means of giving instruction in the science, are so inferior that comparison would be simply ridiculous. We really trust, that the good sense of the Hall authorities will point out to them the absurdity of their position.

The Physicians', Surgeons', and General Practitioners' Visiting List, and Register of Engagements for 1850. London: John Smith.

To such of our readers as have used the "Visiting List" for the past year, our recommendation of the Number for 1850 will be unnecessary. The few who have never seen the "Visiting List," we strongly recommend to obtain it. That its judiciously-arranged contents will save them much trouble, we can affirm from personal experience. It contains, in addition to the ruled papers, an almanack; a Table of the various Medical and other Scientific Societies of London, their days and hours of meeting; a List of the Physicians and Surgeons to the London Hospitals, their days and hours of visiting, &c.; and a variety of matters of service to the Practitioner of Medicine.

On Tic Doloureux, and Other Painful Affections of the Nerves; with Suggestions for their Treatment by the Aneuralgicon. By C. Toogood Downing, M.D., M.R.C.S., &c. Pp. 73. London: J. Churchill.

Dr. Downing's pamphlet is published for the purpose of introducing to the notice of the Profession an instrument he has devised for applying "warmth and sedative vapour" along the course of the trunk any given nerve. This instrument he has termed to the Aneuralgicon. It consists of a cylinder to hold some sedative drug, the smoke and vapour from which is to be applied to the painful spot; a pair of bellows, the nozzle of which enters the lower part of the cylinder, and forces a current of air through the ignited body; and finally, a caoutchouc tube, attached to the upper part of the cylinder, by which the hot air and vapour can be directed on to any part of the patient. Cones of various sizes are made to fit the free extremity of the tube, so that the current of air may be large or small, at the pleasure of the operator. It is evident, that, by the use of the bellows, the temperature of the current may be varied at will. The drugs used for the purpose of assuaging the pain in tic, by Dr. Downing, are stramonium, belladonna, &c., the combustion being supported by a little finely-bruised cascarilla bark. The odour of the latter may also enhance the confidence of the patient in the virtues of the aneuralgicon, and so tend in certain cases to assist in the cure. From the cases detailed by Dr. Downing, it appears, that, in some instances, his ingenious mode of applying heated air (for it is to that alone we should attribute the good effects obtained, and not to the drugs) has been attended with the most beneficial effects.

A Synopsis of Diseases of the Human Ear. By Wm. Harvey, Surgeon to the Royal Dispensary for Diseases of the Ear, M.R.C.S., Fellow Royal Med. Chir. Society.

From the very imperfect account of defects of the organs of hearing contained in works on Surgery, the treatment of that class of diseases has in a great measure fallen into the hands of charlatans. The Synopsis of Mr. Harvey contains a classified list of *all* the diseases of the ear—their seat, symptoms, causes, and treatment. The classification is judicious, though we think it would have been more intelligible to the majority of his readers, if the names of the classes, orders, and genera, had been English, or at least familiar words; and surely Inflammation is as good a term as Phlogosis. The general arrangement of the table is clear, so that any particular fact can be ascertained without labour, a point of no small moment in tables of the description of that respecting which we are here speaking.

The Synopsis is printed on one sheet, 3 feet in length and 24 inches in breadth. The annexed specimen will give our readers a better idea of this valuable table than any description.

Those who are but imperfectly acquainted with diseases of the ear, will find this a good introduction to their study; while those already familiar with them, will acknowledge it to be a useful remembrancer.

GEN. I.—PHLOGOSIS.

Species.—1. Mucous Membrane. 2. Periosteum.
a. Acute. *a.* Acute.
β. Chronic. *β.* Chronic.

GEN. II.—AKOLOUTHLÆ.

Species.—1. Ear-Ache.
2. Tumefaction.
a. Membrane.
3. Engorgement.
4. Abscess.
5. Purulent.
6. Ulceration.
7. Excrescences.
a. Polypus.
β. Fungi.
γ. Ossification.
8. Caries.
9. Gangrene.

Mucous Membrane of Tympanum.	Diminution of hearing. Various noises. Dull pain. Hearing partially restored when perspiring from exercise. Hearing declines. Deafness.	Cold. Scrofula.	Introduce the catheter into Eustachian Tube and wash out Tympanum with distilled water. Apply the air douche. Emetics. Compound Decoction of Dulcamara. Antiphlogistic regimen. Out-door exercise. Spare diet.
Periosteum of the Tympanum.	Fever. Pain deeply seated. Diminution of hearing. Pain increasing, swelling extends over the face. Deafness. Pulse quick and hard. Restlessness. Delirium. Puriform fœtid discharge. Disease extends to the brain.	Congestion of Mucous in Eustachian Tube, and in the Tympanum.	Venesection. Seton in neck. Fomentations. Submer. Hyd. et Jalap. Tepid injections frequently. Warm gargles. Saline purgatives with antimonials. Warm bath. Leeches round Auricle, night and morning. Antiphlogistic regimen.
Cavity of the Tympanum.	Hectic fever. Noises increase. Destruction of the Membrana Tympani. Vacuation of the Ossicula auditus. Intense pain in the head. Stupor.	Cold. Scrofula.	*Ear-ache*, apply suppositories of Opium and Hyoscyamus to the Meatus. Saline Purgatives. Injections of tepid water. Heal ulcerations with injections of Pyroligneous Acid and Tr. of Iodine. To excrescences apply a solution of Sodæ bi-boras. If the case does not readily yield, an alterative course. Tincture of Iodine small doses. When gangrene ensues, apply Tr. of Iodine, and use injection of Pyroligneous Acid. Wash out the Tympanum frequently.
	If patient survives the inflammatory stage, one or more of the Sequelæ is the consequence of this dangerous complaint.		

Digestion and its Disorders, considered in reference to the Principles of Dietetics and the Management of Diseases of the Stomach. By Langston Parker, Professor of Anatomy and Physiology in Queen's College, Birmingham. Fcp. 8vo. Pp. 88.

Mr. Parker is well known to the profession by his work on "The Stomach in its Morbid States," and by several other contributions to medical literature. The volume before us supplies, to a useful and very laudatory extent, a desideratum in the field of practical dietetics. It is all very well to attack indigestion with pills, potions, and so forth; but the bloated dyspeptic, who swallows most scrupulously the contents of four boxes and bottles, and yet returns to his habits of libation and gluttony, reminds one of that wicked old Turk who used to bolt a verse of the Koran every morning as an antidote to whatever sins he might choose to commit during the day. And yet, the practitioners are not few who think that aperients, and tonics, with an occasional dash of a mild mercurial, are all that are necessary to cure the gastric grievances of the many, whose only idea of *living* consists in eating, and drinking, and making merry with their friends. Far better is it, in correcting an error already existing, to teach the sufferer how he may avoid its repetition. To those not skilled in this form of conscientious and judicious advising, we would recommend the perusal of Mr. Parker's work. It contains many valuable and pointed truths, which the practitioner may make of daily use, and the patient may apply with constant advantage.

On Stammering and its Treatment. By Bac. Med. Oxon. J. Churchill. 1850.

This Treatise is particularly addressed to those persons who are afflicted with an impediment in their speech, but who do not stammer, or who stammer comparatively very little when alone, and perfectly free from the anxiety occasioned by observation. Casual readers might imagine, that the Author, in thus confining his remarks, could only benefit a portion, and probably but a small portion of those whose speech is affected; but any one who has paid much attention to this distressing affection, cannot but have remarked, that instances of stammering from defect in the mental, or deformity in the vocal organs, are very rare; while the majority of stammerers may be classed as persons whose impediment arises solely from nervousness.

The Author very justly observes, that before we can cure stammering, we must clearly understand what causes it; and this necessarily involves the question, "What is speech?" In reply, we find he divides speech "into four distinctive elementary processes," a defect in any one of which may cause an impediment in it:—

1. There is the generation of an idea in the brain.

2. There is a generation of the will or determination to express this idea.

3. The stimulation of the motor nervous system, which is connected with the organs of speech.

4. The action of these organs, when thus stimulated.

To the last of these relate nearly all the plans of cure of stammering which have been suggested; and these are all carefully passed in review, their advantages shown, their objections displayed, and the consequences of implicitly following them are clearly laid down.

It must be evident, that defects in the first or second "elementary process," though they may affect the speech, are not likely to produce such an impediment as that usually known as stammering; while, since stammering does not occur in infancy, nor does it arise until the motor nervous system is called upon to play a very complicated part, (viz., when articulated speech begins to be perfected,) it is presumed by the author, (and fairly so, we think,) that the deficiency exists in the motor organism, or in the third element of speech.

Stammering, therefore, is held to be occasioned by an excessive irritability or sensibility of nervous fibre, which does not admit of the pressure of excitement, without causing the parts tributary to it to run into spasmodic action. This is the primary cause, and may also be termed the physical cause. Soon, however, a second influence is at work, for experience of a person's own unfortunate peculiarity occasions excessive mental anxiety about his speech. This renders the affection complex, being partly physical and partly mental,—and these influences act in different proportions upon individuals, according to their characteristic idiosyncrasies. The Author sums up with the conclusion, that in all cases, whether the mental or the physical influence be in excess, the motor organism is not equal to the mental energies, and that the loss of this equilibrium is the ultimate cause of stammering.

These views are supported by various references to kindred affections, such as chorea, tetanus, epilepsy, &c., and it is remarked that "stammering is, in fact, a chronic chorea of the speech muscles.

The Author has also entered into a very interesting account of the circumstances facilitating the appearance or absence of the affection, in which he treats of the effects of temperament, education, and sex, and last, not least, of the tendency to it which is occasioned by the great want of melody in our national language.

The concluding chapter is devoted to a recapitulation of the most desirable physical remedies which can be employed in the treatment of stammering, and which must be varied in different individuals; but more particularly to remarks upon the moral remedies which should be resorted to for the purpose of restoring the disturbed equilibrium between the mental and physical energies requisite to effect speech. With this view various considerations are offered, all tending to diminish this undue preponderance,—the most important of which are, the abstraction of the mind from the subject of stammering,—taking care not to excite emotion more than is absolutely necessary,—avoiding every occasion which is likely to cause excitement,—and strengthening the physical energies by improving the health, and the mental energies by invigorating associations.

We only regret that want of space prevents our making extracts from this Treatise, and presenting the Author's views more fully to our readers; but we must refer them to the Work itself for further information upon this important subject, and we will merely add, that we have perused it with much interest. To those who are themselves afflicted we can recommend it, as giving them a clearer insight into the nature of their affection, and its rational treatment, than any work which has fallen under our notice; but we especially recommend it to the perusal of parents, guardians, and elder friends, who have the means of inducing the youthful mind to exert that influence over itself which can alone effectually cure the majority of cases of stammering.

REPORTS OF SOCIETIES.

WESTMINSTER MEDICAL SOCIETY.

F. HIRD, Esq., President, in the Chair.

INSANITY AFTER USE OF CHLOROFORM—ARCUS SENILIS—HEN'S EGGS UNITED LIKE THE SIAMESE TWINS—UTERINE SCARIFICATORS—CONTAGION OF CHOLERA—EPILEPSY AND PUERPERAL CONVULSIONS.

Dr. Webster mentioned a case of midwifery in which a drachm of chloroform had been employed, the effect of which was sudden and violent, the patient becoming quite insensible. After a painful and protracted labour, she was left in a very nervous condition, and ultimately became maniacal, requiring coercion. This condition lasted for many months.

Mr. Canton described the microscopic anatomy of the arcus senilis, as consisting of that state of disease described by Paget as atrophy with fatty degeneration. It is always found in connexion with a corresponding opacity of the crystalline lens and capsule, and is sometimes so extensive that a very small portion only of the cornea remains clear. Mr. Canton believed, from the results of the examination he had instituted, under the microscope, that it was caused by a deposit of adventitious fat in the cells.

Dr. Cormack exhibited two hen's eggs, united at one end by a narrow neck. They were somewhat misshapen by having been pressed on each other. He (Dr. Cormack) believed the specimen to be unique. Eggs with double yelks were not uncommon, and he had once seen a triple yelk, but here were two eggs, in distinct and perfect shells, joined by a neck, also thinly covered with shell. It was surprising that the hen had been able to pass the united eggs, from their breadth and parallel position, for hens often die when the egg is in a transverse position. The hen in question was of the Dorking breed, and belonged to Dr. Cormack.

Dr. Routh exhibited several instruments for scarifying the neck of the uterus.

Mr. Greenhalgh bore testimony to the utility of the scarificator. He had seen it employed in two cases, and the amount of blood drawn was considerable, and sometimes continued for two or three days. The patients, however, experienced but little inconvenience from it; and one he had seen that day walked home afterwards.

Mr. Barlow narrated several cases to prove the contagion of cholera.

Dr. Cormack then resumed an adjourned discussion on epilepsy and puerperal convulsions; and said, the renal puerperal convulsions were not necessarily, nor, indeed, were they generally connected with organic disease of the kidney; the pressure of the uterine tumour upon the emulgent veins being sufficient to cause congestion of the organ, functional disturbance, deficient blood-moulting, and consequent toxœmia. The lochial puerperal convulsions, depended upon suppression of the lochial discharge. Toxœmic convulsions (renal and lochial) were produced by direct impressions upon the spinal centre; but the cases which had been so instructively brought before the Society by Dr. Tyler Smith, were of reflex or eccentric origin; though, of course, it must be remembered, that cases of mixed origin occurred.

The main propositions which Dr. Tyler Smith had sought to establish were these,—"that epileptics were not more liable than others to puerperal convulsions; and that pregnancy has a tendency to meliorate epilepsy." But what is epilepsy? What are puerperal convulsions? Epilepsy cannot be considered as the name of a disease; and if it have any definite meaning at all, it is when limited in its use to describe a particular form of convulsion. Its causes are very various; and ovarian irritation is only one of them. Again, puerperal convulsions do not by any means always depend on the same pathological causes; and each case must stand by itself, till investigated and placed in its own group. The term is mischievous, if employed with reference to causes or treatment, and ought to be restricted to its strict meaning—convulsions occurring in puerperal women. They may not be epileptic, but they sometimes are of this description. Dr. Cormack had seen—in common, he ventured to say, with most of those who had heard him—fits of strictly epileptic character—the coma, the clenched teeth, and bitten tongue—arising from toxœmia, dependent on organic or functional disease of the kidney or of the liver; from irritation of the peripheral extremities of the intracranial nerves by osteophytic specula, by the presence of effused fluids, or by cerebral hypertrophy or tubercular deposit; sometimes from irritation of the fifth pair of nerves in dentition; from irritation of the nerves of the stomach, bladder, uterus, and ovaries; and, if epilepsy be more common in females, the two latter causes must be those which cause this preponderance. The greater frequency of epilepsy in woman is not, however, established; for there is reason to believe, that the severer forms of certain other convulsions to which the sex are liable, have been indiscriminately placed with it; and perhaps a rigid diagnosis might nearly, if not entirely, equalize the number of epileptic seizures in the sexes. From these considerations, Dr. Cormack maintained that ovarian irritation was not so frequent a cause of epilepsy as some supposed; and that it was only when the fits depended upon that cause, that the ovarian repose of pregnancy could be meliorative. Ovarian repose, however, was by no means a constant condition in gravid women. If a young unmarried woman had epileptic fits at her catamenial periods, marriage might be allowed, because pregnancy would probably be curative; but it was only when thus stringently limited, that the sanitary influence of marriage in epileptics could be admitted. And if Dr. Smith's proposition was intended to be a general one, he (Dr. Cormack) must dissent from it. The ovarian repose of pregnancy can only be curative when the seizures depend on ovarian excitement. After some further interesting observations, which our limits preclude us from detailing,

Dr. Cormack said, that the three points to which he wished to direct attention were—

1st. That the term epilepsy ought to be used only to designate a particular form of convulsion.

2. That pregnancy can only meliorate the condition of epileptics, when the epilepsy is dependent on ovarian excitement.

3. That the abnormal development of the intracranial osteophyte of pregnancy may be an occasional cause of puerperal convulsions.

After some further discussion, in which Mr. Streeter, Dr. James Bird, Mr. Wing, Dr. Snow, Dr. Routh, Dr. Webster, and Dr. Alison took part,

Dr. Tyler Smith, in reply, stated that the case he had brought forward had not been selected to illustrate any particular opinion. The two most important points, namely, that in the majority of cases epileptic attacks were more rare during gestation than at other times, and that epileptics were rarely affected with puerperal convulsions, had not been questioned; but, on the contrary, had received additional confirmation. The cases he had related would, probably, be published hereafter in detail, with others of great interest, which he had since received, but which, at that late hour, he would not read to the Society, though he should have felt bound to do so, had they been at variance with those he had already cited in his paper.

Adjourned.

CORRESPONDENCE.

THE COMMISSIONERS IN LUNACY.

[To the Editor of the Medical Times.]

SIR,—I regret very much that so palpable a case of insanity as that of Nottidge *v.* Ripley, should have become the field of attack between the supporters and opponents of private asylums, because it has given the former the opportunity of laying greater stress on arguments than, under ordinary circumstances, they could well have borne, and of exaggerating instances of unsoundness of mind, which it would be no easy matter to prove untrue, where friends, medical men, (who signed the certificate,) the Commissioners in Lunacy, and the proprietors of asylums, are all concerned to maintain to its fullest rigour, for their own justification, each trivial word or action which appears, however remotely, indicative of the captive's insanity.

Dr. Conolly has the reputation of being the friend of the oppressed, and to him, in a great degree, is the milder system of treatment adopted in our asylums, owing. His Remarks on Asylums in general are just and fair, and if asylums were (see page 12) places of protection "abounding in the means of diverting the thoughts, of calming morbid excitement, of soothing the depressed, of rousing the apathetic, of restraining the lower propensities of the insane, and restoring the control of reason," every man of sense would approve of them; but we all know what human nature is, and that each, in his own pursuit, is essentially the same man, coloured like the chamelion, as it were, by the actual circumstances of his position,—and that man's chief desire is to accumulate; and, while some few nobler persons are actuated by benevolence and a sense of duty in the attention and care they devote to those under their charge, the greater number behold in their patients but so much income, just as the expectant *conducteur* of an omnibus sees in the hurrying and panting pedestrian another sixpence.

One fault among others, in the present system, is the incompetency of the parties appointed to judge of lunacy, in particular cases. Persons have been denominated insane, have undergone years of cruel imprisonment in asylums, merely because they differed in principle and practice from some other men, including, of course, their near friends, the medical men who sign the certificate, the proprietors of asylums, and the Commissioners in Lunacy; all of whom might, upon closer inquiry, be found to be much more eccentric than they from the only true centre of right conduct, viz.:—moral truth and equity.

No one can question the necessity for lunatic asylums; the great difficulty is, to insure their proper management. Two plans here present themselves; the one, that private asylums be altogether abolished, and the whole lunacy of the country be under the care of a Government Board, deputies, housekeepers, &c.: the houses to be subjected to inspection by the magistrates of the counties, who should no longer, as now, make their report to the Board of Lunacy, but, through the regular channels, report at once to the Home Office, which would thus become both a check and a spur on the otherwise arbitrary, or, perhaps, dilatory and inefficient proceedings of the chief Board.

The other plan (also to be guaranteed by the Home Office inspection) should be, that the Board of Commissioners (fewer in number than now) should sit in London, and have attached to them a corps of sub-commissioners, whose duty it should be to visit all the asylums in the country at all times, (not announcing their approach by the rumbling of the old green coach,) and, where requisite, frequently, so as to become intimately aware of all that takes place in them, which must so closely affect the welfare of the parties confined.

The Commissioners should be instructed to cause close investigation into the moral as well as mental qualifications (alluded to p. 35) of persons applying for licences. They, the Commissioners, have not unfrequently been misled by great improvement being visible in the physical health of patients, to conclude that they were recovering from their insanity, overlooking the fact, that while their animal powers had been greatly developed and improved, they had actually become degraded in the scale of moral beings.

Dr. C. asserts, that *the whole time of the Commissioners is spent in endeavouring to protect the insane and helpless, and to prevent the improper detention of persons able to take care of themselves and their property.* What a pity it is that the public have no means of forming a judgment on such noble and philanthropic conduct, except from the Reports of the Commissioners themselves, and the notices which find their way into the papers periodically, of the surprising efforts of the individual Commissioners, who have each visited, in an incredibly short time, thousands of insane patients.

We would gladly see justice done to all, and honour bestowed where due; and to this end would suggest the following alterations in the practice of asylums, whereby their inmates would be protected from injustice, and the Commissioners in Lunacy, proprietors of Asylums, and Medical men connected with them, from obloquy and suspicion.

To remove the anomaly of an irresponsible authority existing in our free country, independently

of the Civil Power, the following practice is suggested:—

1. Every license to keep an Asylum, issued by the Commissioners, shall have no force until approved by the magistrates in Session, such confirmation to be notified to the Secretary of State for the Home Department.

2. A Register of all Asylums, and their inmates, to be kept at the Home Office, open to every one who shall present a Petition to inspect it, containing such reasons for the inquiry as shall be deemed by the Office sufficient.

3. Every medical certificate of unsound mind shall be sanctioned by the signature of a Magistrate or Justice of the Peace, before it can be put in force; a notification of the warrant being executed, to be made within forty-eight hours, to such Magistrate or Justice of the Peace, who shall communicate the same to the Home Office.

4. Every warrant of transfer of an inmate to another Asylum, or release, to be certified by the like civil authority, and its execution likewise notified and communicated.

5. The Reports of Visiting Justices, to be made through the ordinary channels, to the Secretary of the Home Department, and not, as heretofore, to the Commissioners in Lunacy.

6. On such information being conveyed to the Home Secretary as shall satisfy him of any person being unjustly detained in an Asylam, he shall cause a searching investigation (at the public expense) to be made into the case; and, if this inquiry confirms the fact of unjust detention, shall immediately issue his warrant for the liberation of the party so detained.

Much stress has been laid on the propriety of saving the pain and distress which would be occasioned to families, on its becoming known that one of their members has been subjected to restraint. Although we think these feelings are morbid, we should be disposed to respect them scrupulously, were they not liable to be made use of as a veil to screen injustice and persecution. They must be altogether put aside if found to support or countenance practices subversive of liberty.

I am, &c., &c.,

X. Y.

ON THE THERAPEUTIC USES OF GLYCERINE, THE SWEET PRINCIPLE OF OILS.

[To the Editor of the Medical Times.]

SIR,—You have done me the favour, on several previous occasions, to publish remarks upon the remedial agent heading this communication; and I am induced again to trespass on your liberality, by requesting you to reprint, or refer to, some of the observations I made upon Glycerine in your pages upwards of four years ago, as they would appear to be overlooked or forgotten by several of your Correspondents; although my name (printed *Starlin*) appears connected with the subject in your last Number, in a letter from Mr. Amyot of Diss. Now, although Glycerine is not "a panacea for all ills," and particularly for deafness, for which I unsuccessfully employed it, (even before its undrying properties suggested its uses in affections of the skin,) having three members of my own family incurably deaf; yet my further experience has proved it to be deserving of all I have adduced in its favour on previous occasions, which will be found to comprehend nearly, if not every suggestion, for which it has latterly been recommended. Lest, therefore, the Virgilian adage, "*Sic vos non vobis*," &c., find a verification in my instance, I subjoin the quotations referred to:—"Another very efficacious means yet remains to us in *glycerine*, which, as a palliative in squamous affections of the skin, has not, to my knowledge, been hitherto made known or adopted; in fact, it is peculiar to myself, and, although I have not yet addressed the Profession or any learned body upon the subject, in accordance with my intention, when my observations are matured, I will, nevertheless, here announce it for your consideration. It consists in the employment of this liquid lately discovered, which has the property of remaining fluid, and resisting evaporation, under any temperature to which the body can be exposed; indeed, I have wetted a common dinner plate with this fluid, and kept it in an oven whilst a joint of meat was cooked by its side, and the liquid has experienced no evident change or diminution. The facility with which this body mingles with water or other fluids, even oils, renders it an invaluable adjunct to lotions, poultices, embrocations, and applications, whose utility consists not only in diminishing temperature by evaporation, but in softening and relaxing the heated and inflamed skin. The tendency to dry up, and adhere to the part, as is well known, often frustrates the beneficial effects of these applications, and various counteractive expedients have, consequently, been adopted; as the addition of fatty matters, covering the poultice, lotion, &c., with oiled silk. Now, this is rendered entirely unnecessary by the addition of the substance I hand round for your inspection. You will perceive it is like oil, and when rubbed upon the skin it furnishes a watery coating or varnish, which even the microscope fails to distinguish as different from the ordinary secretions of the part. Half an ounce of this liquid, added to half a pint of lotion, will prevent the skin ever becoming dry. In baths the result is also equally apparent; but here the cost is an obstacle, though the liquid is by no means dear, as, at the present time, tons of it are thrown away; but if, as I anticipate, its application prove general, its price will be shortly augmented. This fluid body, to which the chemists have given the name of glycerine, is a peculiar uncrystallizable saccharine matter, found in animal fats or oils, or produced during their admixture and combination with alkalies and oxides. Thus, it is most abundant in the refuse of the soap and stearine matter. That which you are now inspecting was procured from Apothecaries' Hall, and is formed during the manufacture of lead plaster on a large scale. I should mention, that it requires to be diluted with water for use, otherwise it makes the skin feel stiff, uncomfortable, and sticky; but, as I am now about concluding some experiments, long since commenced on the application of this liquid as a therapeutic agent, to several forms of cutaneous disease, I will defer any further observations upon it until a future occasion. In the meantime I shall be obliged if any Professional brother will give it a trial in his practice, and communicate to me the result.

To redeem the pledge thus given two years afterwards, the pages of the same journal (*Med. Times*, Vol. XVI., p. 469) contained a renewal of the subject; when, after having described the mode of preparing glycerine, and its chemical composition, I gave the subjoined summary of its therapeutic uses:—"In the use of glycerine internally I have had but little experience; but it is a mild stimulant, antiseptic and demulcent, and might be employed to sweeten many articles of food or drinks for those invalids whose disordered digestive organs forbid the use of sugar. Pills made with the addition of a few drops of glycerine never become dry, and syrups and extracts, by its means, are kept moist, as also from fermentation; and the formation of cryptogamous vegetation or mouldiness; many other such like uses for this agent will not fail to suggest themselves, for the recapitulation of which, however, your pages can scarcely be deemed the appropriate place. I shall, therefore, briefly enumerate some of the diseases of the skin in which I have employed glycerine with most benefit and success; these are pityriasis or dandreff, particularly that form of the disease which I have termed (*P. congenita*,) lepra, psoriasis, lichen, (in its dry advanced stage,) impetigo inveterate, and prurigo. I have found glycerine also a useful addition to lotions in the encrusted forms of lupus or herpes exedens, and to various syphilitic or strumous eruptions, having a tendency to produce fetid discharges and hard crusts; for which reason also, it has proved of service in the scabbing stage of small-pox. As a wash also for the hair, and for *chapped hands, face, or nipples*, combined with a little rose-water and a few grains of borax to the ounce, the glycerine being in the proportion of one-sixteenth, this remedy furnishes, perhaps, one of the most elegant and efficacious preparations which has been introduced. It may also be combined with soaps, which it renders peculiarly softening and detergent, particularly for individuals who have a dry or hard skin."

To this somewhat lengthy communication I will only add, for the guidance of those amongst your readers who may desire to make trial of this remedy, a few of the more common and useful formulæ employed at the London Cutaneous Infirmary, where glycerine is extensively used; notwithstanding its present high price, proves a considerable obstacle, the funds of this Institution being quite inadequate to meet the increasing demands upon them. I would premise, that glycerine should *never be used undiluted* for cutaneous maladies; and that when prescribed in the annexed recipes, the purified *inodorous* and anhydrous quality is alone indicated, which is of a pale sherry colour, and of the consistence of treacle. N.B. Beware of a spurious article lately found in the shops, composed chiefly of honey, or sugar and water.

For superficial burns, scalds, or excoriations: intertrigo, chaps of the lips, herpes labiorum, &c., ℞ Gu. Tragac. pur. ʒij. ad. ʒss.; liq. Calcis, ʒiv.; Glycerine purif. ʒj.; Aq. Rosæ dest. ʒiij.; to form a soft jelly, to be used by way of ointment or embrocation.

For prurigo, lichen, strophulus, lepra, psoriasis, pruritus, &c.:—℞ Acid. Nitric. del. ʒss. ad. ʒj.; Bismuth. Trisnitr. ʒss.; Tinc. Digitalis, ʒj.; Glycerine purif. ʒss.; Aq. Rosæ, ʒviiss. M. for a lotion to be used by dabbing the part.

For chapped nipples or hands, fissures of the lips, irritation of the skin of any kind, as after shaving, exposure to the sun, for Pityriasis, &c.:—℞ Sodæ Biboracis, ʒss. ad. ʒj.; Glycerine pur. ʒss.; Aq. Rosæ, ʒviiss. M. for a lotion, to be used by dabbing the part affected.

For alopecia following fevers, &c., or for the falling off of the hair, dryness, or want of action of the scalp, thinness of the hair, &c.:—℞ Sp. Ammon. co. ʒj.; Glycerine pur. ʒss.; Tinct. Cantharid. ʒj. ad. ʒij.; Aq. Rosmarin. ʒvij. M. for a lotion, to be used with a wet hair brush once or twice a day.

For "hot" rheumatism, or arthritic gout, neuralgic pains, sprains, bruises, stiffness, &c.:—℞ Lin. Saponis comp. ʒiss.; Glycerine pur. ʒss.; Ext. Belladon. ʒj. ad. vel. Veratriæ, &c. M. for an embrocation, to be used twice a day in the ordinary manner.

I am, Sir, your obedient servant,

3, Saville-row, St. James's. JAMES STARTIN.

MEDICAL REFORM.

[To the Editor of the Medical Times.]

SIR,—A letter appeared last Saturday, in the pages of your Contemporary, the *Lancet*, which seems designed, and, so far as it has any influence, *calculated* to sow dissension between the friends of medical reform in the two leading cities of Scotland; and which bears strong internal marks of being the production not merely of an enemy, but of one unconnected with either city. It is characterised by vulgarity and spitefulness throughout; and the signature assumed by the writer, "A Member of the Royal College of Surgeons of Edinburgh," stamps it as a spurious production; inasmuch as there is no such title connected with the Royal College; a fact well known to everybody here.

I have only to conclude, by assuring all respectable members of our Profession in London and in Glasgow, that the sentiments to which this person has given utterance, would be universally scouted by the medical reformers of Edinburgh, and especially by such of them as are entitled to subscribe themselves, like your present Correspondent,

A FELLOW

Of the Royal College of Surgeons of Edinburgh.

Edinburgh, 3rd January, 1850.

[The writer of the above has favoured us with his name.—ED. *Medical Times*.]

ON CERTAIN EFFECTS OF AN INVETERATE HABIT OF SMOKING.—THE DENUDATION OF THE PERIOSTEUM OF THE FANGS OF THE TEETH.

[To the Editor of the Medical Times.]

SIR,—Permit me to call your attention to the fact, that extreme smokers often suffer greatly after the habit has been intemperately indulged, particularly with their teeth, which are found to be denuded of the periosteum of the fangs. In order to render the subsequent statements and inferences appreciated, we may remark, that tobacco is ranked, by writers on toxicology, among the narcotic poisons, that it is injurious to the digestive organs, &c. You will, therefore, not be surprised that the teeth should suffer from the use of this narcotic, because they are sympathetically affected under every form of dyspepsia, whenever, in consequence of such disturbed functions, there is an excess of acidity.

It is my intention, therefore, to attempt to explain why tobacco induces a double injury when used for smoking, either in pipes or cigars.

The phenomena attending the process of combustion, may be observed as follows: that during the time of its burning, there is given off a white smoke, which contains some small portions of the essential oil of the tobacco, which, as being a concentrated portion of the narcotic agent, affects the teeth; and some of it, mixing with the saliva which, if carried into the stomach, induces derangement of that important organ. Consequently, smoking tobacco is likely to affect the health of the teeth in a direct

manner, and, indirectly, as a cause of morbid conditions of the stomach and the auxiliary agents of the vegetative functions.

As evidence of my first statement it may be remarked, that smokers are subjected, occasionally, to agonizing pain in their teeth, even when there does not appear any symptoms of dyspepsia. In these cases, the crowns are often sound, but the enamel, instead of being a beautiful polished, white, opaque substance, as in its normal condition, presents a translucent and vitreous appearance, whilst the edges of the incisors are often transparent. That we may attribute these changes to the cause previously stated, arises from the fact that this is the ordinary aspect of the enamel in great smokers. The colour and appearance cannot be confounded with the dark shades given to this substance whenever the subjacent dentine is carious. We have seen numerous well-marked instances in persons who have smoked clay pipes, or meerschaums, or cigars, the effect being the result of the heat given off whilst the tobacco is burning? It should be remembered that the average temperature of the mouth varies from 88 to 95 degrees of Fahrenheit's thermometer. It might have been *à priori* inferred, that hot streams of smoke, at such an elevated temperature, could not be harmless. Besides which, the stimulating influence of the heated smoke excites the action of the salivary glands, producing an excess of the fluid, which after a time ceases, and a less than a sufficient quantity of saliva is produced; and, when such is the case, the smoker desires something "to wet his mouth," and hence the habit of drinking stimulating beverages is the ultimate consequence.

In a vast number of cases of extreme smoking, when those who have indulged in such excess have had what has been called tooth-ache, their sufferings have been great, yet in most of the instances I have observed, that the *crowns* of the affected teeth seemed perfect, excepting that the enamel appeared to be altered in structure and colour (as already mentioned), and therefore I directed my especial attention to the state of the fangs, and found them, in all such instances, denuded of their *periosteum*, being rough at the extremities, as if rasped; whilst the colour of the fangs themselves resembled horn, being of a darker hue than healthy *dentine*, and of a porous appearance, differing materially from the usual dense substance which envelopes them, and which substance is designated *crustapetrosa*. In consequence, therefore, of the active absorption going on, the affected teeth act as extraneous bodies, and produce much local irritation. Hence, from data of this kind I am led to the inference, that tobacco affects the teeth themselves, and that the affection must not be confounded with their injury, induced by the acidity often caused by stomach derangement, resulting from an inveterate habit of smoking tobacco. There is nothing speculative in these statements. Their truth has been verified by years of experience. The symptoms are well-marked in the "smokers' disease." They are as follows:—More or less uneasy sensations about the crown of the tooth, which gradually extends to the fangs. At this stage of the disorder, if the teeth are touched, there is a tenderness experienced; and if bitten on in this condition, a sudden and most painful sensation is experienced. As the disease proceeds, the patient seems cognizant of the immediate seat of the disease; the agonizing pain being confined to the bottom of the alveolar process of the affected tooth or teeth, which is attended with a palpable throbbing; or, as an unscientific sufferer expressed it, "a jumping pain." The most distressing sensations are felt under vicissitudes of climate—in great and sudden changes from heat to cold, or *vice versa;* or after drinking spirits-and-water, wine, beer, or any other alcoholic stimulants. In other words, the teeth, under this affection, suffer from everything that accelerates the circulation. Among many of my most intelligent patients, when there happened to be a space (from previous extraction) between the affected teeth, they have described their sensation as if a series of galvanic or electrical shocks continually passed from tooth to tooth; and, tired at last by this continued disturbance, they have had the offenders forcibly removed.

It is, therefore, very evident, that when so much suffering results from teeth that are not *carious*, we may safely attribute the pain to the fact, that with the loss of the periosteum, the fangs loose their normal vitality, and that the local irritation arises from the fangs acting as a foreign body.

We are further prepared to explain, when teeth are thus injured by the action of hot fumes of a powerful *narcotic* poison, that they are rendered, in consequence, more susceptible to any other kind of destructive agency. Among the causes which tend to expedite rapid changes, must be mentioned *dyspepsia*, in which disease the saliva is more or less acidified, and the condition of smoker's teeth are acted on so much more potently. For, when the teeth are healthy, they, like all organic substances, can resist, to a certain degree, the action of corroding agents; but, when they no longer retain a normal vitality, their decomposition follows.

The case must be thus briefly stated, that the injury of the teeth in inveterate tobacco-smokers is induced by a two-fold operation. 1st. The fangs being denuded of their periosteum, must be regarded as extraneous bodies, and are then acted upon most energetically by the absorbents; and 2ndly. When such is the case, the teeth are liable to be acted on by acids in an inverse ratio to the loss of vital action. Finally, these two causes enable us to account for the translucent appearance of the enamel in the teeth of smokers: as this appearance is a simple result of the rapid loss of the earthy matter. We may add, that there appears to be a well-defined difference in the diseases of the teeth, resulting from stomach "diseases *per se* and the smoker's disease." In the first species the gums are spongy and full, or else they recede from the necks of the teeth, and by exposing the alveolar processes, subject them to absorption. Then the *denudation* of the periosteum commences at the necks of the teeth, and *caries* is the consequence. But, in the "smoker's disease," these processes are reversed, the hot smoke affects the fangs in the first instance, without, in any serious way, affecting the crowns; so that the horrid pain does not arise from exposure of the pulp cavity (as in ordinary caries,) but from the roughened state of the denuded fang or fangs keeping up constant local irritation.

I am, Sir, yours, &c.
J. L. Levison.

14, Devonshire-place, Brighton, Dec. 4, 1849.

CHOLERA IN PENZANCE.

To the Editor of the Medical Times.

Sir,—Having, in a former number of the *Medical Times*, given an account of the epidemic that visited Penzance in the autumn of 1848, I will, with your permission, briefly state the nature of the health of the town since that visitation up to the present time. The diarrhœa and dysentery entirely disappeared in February, and the town continued free till May, when a few cases of diarrhœa again occurred, but in a very mild form. About this time the cholera had made its appearance in different parts of the Kingdom, and in Cornwall visited Mevagissey with frightful severity. It visited Plymouth, Falmouth, Truro, and Hayle very severely; and the last town is but eight miles from Penzance, with omnibus and other communications every hour in the day. This being the case, every one expected that we should be visited. In this state the Mayor called a meeting of the Council, and means were advised to ward off the attack. The Town Council, with the Medical men of the town, were formed into a Board of Health. The Medical portion of the Board were requested to divide the town into districts so as to suit their conveniences. This they did, and one was appointed to each district, and a member of the Town Council, with another gentleman of the town, assisted him in his duties of the district. It was agreed, that every house in every district should be visited officially once every week, and as often as one or other of the visiters could beside. This was done, drains were cleared, cess-pits filled up, and everything offensive removed. The town had not been so clean for years as it was then, and is now. It was feared that an alarm would be created, which would do more harm than the effort could do good. To prevent this, the object was clearly explained to the people; and when they saw that there was no difference made between the rich and poor—all assisted us in our efforts. I believe there were but two who resisted, and these were brought before the Mayor and fined.

I had the district of the quay and shipping assigned to my share—a district generally supposed to be amongst the worst part of the town. Diarrhœa was not of unfrequent occurrence; but it no sooner made its appearance than the patient was visited and the disease checked. In some cases the diarrhœa was severe, and would have been much worse but for the early application for medicine. In one case, that of a pilot, it was very severe. He went off in a boat to board a ship from Swansea—a place in which the cholera was raging very severely—but the crew on board were healthy, and had been so all the time they were in Wales. While passing under the stern of the ship, holding by a rope, this man felt a sudden and desperate pain in the stomach and bowels, which ended in rapid fluid evacuations. When I saw him in about half an hour, he had purgings, vomitings, and spasms both of the bowels and legs. He became cold and pale, and shrunk very considerably. He recovered, however, and the house was cleaned, white-washed, and well-aired, and no other case occurred. I had several cases of diarrhœa after, but all of a very mild form. My own district forms but a repetition of what was found in all the others.

A case of cholera occurred in the district of Mr. Moyle, which terminated fatally in a few hours. In this case all the inmates were removed to the hospital prepared for them, and the dead was removed to its last resting-place, and the house thoroughly cleaned. Several of the parties thus removed had diarrhœa, but, under the care of Drs. Montgomery and Millan, soon recovered. Shortly after this case, another occurred in the district of Mr. Berriman, which also terminated fatally. The living were again removed, and though there was slight diarrhœa, yet all recovered. About this time many cases of deranged bowels occurred; but, by constant vigilance, all recovered, and we have had no return up to the present time.

From the cholera being so near, and the constant intercourse going on between Penzance and infected districts, there was every probability of an invasion, and yet there may be said to have been none. But diarrhœa became so prevalent, that I think but for the timely and judicious arrangements of the authorities we must have had the cholera.

Each medical visiter had his own district, but if he was out of the way, another was to be called; but this was not to interfere with private arrangements. I make these remarks in allusion to Mr. McClure's paper, at page 472, and in confirmation of your own views.

I enclose you a copy of one of our public notices for your inspection.

I am, Sir, yours truly,
R. Q. Couch.

"CAUTION.

"The Board of Sanitary Inspection think it right to advise the public, that, at the present moment, it is of the utmost importance to every individual to adopt measures for securing the public health; and to this end:—

"Let all pay strict attention to cleanliness in their persons and dwellings; and to effect this, remove speedily deposits of ashes, offal, garbage, and every kind of filth.

"Inspect and cleanse gutters, drains, pools, and cess-pits.

"Open windows frequently to change the air of rooms and staircases.

"Let whitewash of quick lime be used plentifully.

"The Board have appointed sub-committees to visit the different districts to report on the state of the same, in order to secure attention to the laws now in force for sanitary protection.

"The Board of Highways will remove ashes, or other refuse, from every house, twice, at least, in each week, or oftener if requested. Notice should immediately be given to the surveyor, Mr. Charles Reynolds, in the event of this duty having been in any case neglected.

"In addition to the above, the Board recommend strict attention to health; and in case of indisposition, and especially 'bowel complaint,' the poor should make immediate application to the district surgeon,—viz., Mr. Richard Q. Couch, residence, Chapel-street, who will attend gratuitously. Assistant Visiters: J. Batten, Esq.; Mr. James Flamank.

"The Board will meet at the Council Chamber every Monday evening, at seven o'clock, where communications may be addressed, or personal application made, referring to any existing cause of complaint.

"John N. R. Millett,
Chairman of the Board.

"Council Chamber, Pensance,
August 28th, 1849."

THE USE OF HYDROCYANIC ACID IN CASES OF BURNS.

[To the Editor of the Medical Times.]

Sir,—Will you oblige me, by inserting in the *Medical Times* the following treatment of burns:—Place in a mortar two ounces of simple cerate or lard, and rub into it, gradually adding, as much hydrocyanic acid, of Scheele's strength, as it will take up, then spread on lint or linen, and apply it to the burned parts. This treatment will be found to allay all pain and vascular excitement. If the burned surface is very extensive, the patient should not be left while

this application is applied, and opium should not be administered in any form with the application. A little child of four years old was treated with this application, whose chest was severely burned, which had caused the child to be in fits before the application was applied; but very soon after its use the fits ceased, and the little patient recovered without a return of them. I have been thus led to trouble you with this, seeing in the papers the death of a lady at Cheltenham very recently from burning.

I am, Sir, yours much obliged,
A SURGEON.

January 3, 1850.

WESTERN MEDICAL AND SURGICAL SOCIETY.—At the last meeting of the members of this Society, Mr. G. E. Blenkins narrated a case of congenital obliteration of the ductus communis choledochus in an infant, who survived its birth thirty-three days. No bile had ever passed into the intestines, either during its fœtal condition or subsequent to birth. The angle of union of the hepatic and cystic ducts was found distended to the size of a walnut, and contained inspissated bile. Large deposits of blood were found in the brain, side, leg, and arm, and also in other parts of the body. The author attributed these to the fact of the want of due nutrition of the tissues, from the chyle not being separated from the chyme, from the absence of bile in the intestines, and thought this determined the question as to the true and primary use of the bile in the small intestine.

THE MAPLE-DURHAM WATER SCHEME.—We are glad to find that public attention continues to be directed to the subject of an alteration of the present objectionable supply of water to the Metropolis. The points for reform are quality, quantity, and cost to the consumer. The exposition put forth by the suggesters of the plan for procuring water from the Thames at Maple-Durham, contains a very clear and comprehensive review of these three points, and is well worthy of the attention of those who are interested in the subject. That the existing fluids dispensed (and that sparingly) by the Metropolitan Water Companies, are quite unfit for the wants of the inhabitants, is a fact that few men are now bold enough to deny. We *must* have pure soft water distributed abundantly and continuously throughout every part of town. It must not be confined, as now to particular streets, houses, or floors of houses; it must be generally and universally distributed, so that the poor, as well as the rich, may enjoy the luxury of cleanliness at a moderate cost. The quality of the water, however, is the first point to be considered; and it would appear that good water is to be obtained in one of two methods; either by procuring it from fresh sources, or by purifying the present supply. We are perfectly aware that the existing Companies are unable to furnish sufficient for the requirements of the entire metropolis, but, since cost of production is of importance in the question, we cannot help thinking that it would be cheaper to purify the existing supply (possibly siphonic filtration through charcoal would best accomplish this) and to procure the remaining quantity from some near available source, than to seek an entire fresh supply. If, however, the latter plan be indispensable, the water must be obtained either from Artesian wells or from the Thames. Each of these plans has its disadvantages. The object is to obtain *pure soft water*. That from the Artesian wells is exceedingly soft, but then it is highly alkaline, which renders it objectionable for some culinary purposes. On the other hand, the Thames water is very hard, and more or less impregnated with organic matter. It is obvious, therefore, that wherever the water for London and its suburbs be obtained, it will have to undergo some preparatory process before it will be fit for use, and it only remains to be determined which plan will supply the purest constant supply of water at the leat cost. The Thames seems to be the most natural and available source, and, hence, several schemes have been laid before the public for obtaining the requisite supply from one or another part of the river; and, as far as we have been able to judge, from the pamphlets issued by the various proposers, the plan of the "Metropolitan Water Supply Company," for taking it from the stream at Maple-Durham, between Panbourne and Reading, has many advantages over the other.

THE ROYAL POLYTECHNIC INSTITUTION.—We notice, with much satisfaction, the endeavours of the Managers of this Institution at the same time to instruct and amuse. The lectures of Dr. Bachoffner, "On the Philosophy of Scientific Recreation," are worthy of the most honourable mention, as an attempt to redeem pure science out of the hands of the "conjurer."

THE PUBLIC HEALTH IN THE METROPOLIS.

The deaths registered in the metropolitan districts, in the week ending last Saturday, amounted to 1133. In the first week of ten previous years (1840-9) they ranged from 869 to 1510; and the average of the ten corresponding weeks, raised according to increase of population, which is estimated at 1·55 per cent. annually, is 1252. As compared with deaths registered weekly in last December, the present Return exhibits an increase of nearly 100. The mortality from bronchitis has increased in two weeks from 78 deaths to 103, while that from pneumonia has increased from 69 to 95; the averages of the two diseases in the same week of ten previous years are 57 and 104 From phthisis there were 129 deaths, which is slightly under the corrected average. From small-pox there were only 8; in the ten corresponding weeks of 1840-9, this epidemic ranged from 5 to 86. Hooping-cough, which was fatal to 23 children, is also under the usual number. Measles, scarlatina, and typhus, produce nearly the ordinary amount of mortality; but all the five epidemics, with the exception of measles, are now much less fatal than in the same week of last year. From diarrhœa there were only 8 deaths; but 6, which is rather more than usual, occurred from dysentery.

The deaths in the several hospitals of London occurred as follow:—

Kensington House Asylum	1	Warburton's Lunatic Asylum	4
Lock	0	London	13
Consumption, Brompton	3	Portuguese Jews' Hospital	1
St. George	6	Lunatic Asylum, Bow	1
Grenadier Guards' Hospital	1	Guy's	9
Westminster	5	St. Thomas	4
Charing-cross	2	Bethlem	0
Middlesex	4	New County Lunatic Asylum	1
University College	8	Peckham House Lunatic Asylum	1
Small Pox	0	Camberwell House Lunatic Asylum	2
Fever Hospital	0	Dreadnought Ship	4
Invalid Asylum, Stoke Newington	1	Devonshire Ship	3
King's College	3	Royal Hospital, Chelsea (South)	2
St. Luke	0	Royal Hospital, Greenwich (East)	7
City of London Lying-in Hospital	1		
St. Bartholomew	7		
Miles' Lunatic Asylum	0		

In the Registrar-General's Return for the Week, (full of the most important particulars,) the following Table is given, showing the Mortality from Cholera, 1848-9, and the Annual Mortality from all Causes, 1838-44; with the Elevation of the Dwellings Above High Water-mark, the Average Annual Value of Houses, and the Average Cost of House-room, in the Districts of London Supplied by Nine Water Companies:—

WATER COMPANIES which supply the several groups of Districts.	Sources of Water Supply.	Deaths from Cholera, to 10000 Persons living.	Annual Mortality from all Causes to 10000 Persons living. 1838–44.	Average Elevation in Feet of the Dwellings above High Water Mark.	Density of Population. Persons to an acre, 1849.	Density of Population. Persons to each inhabited house, 1849.	Average Annual Value of Houses, 1842-3.	Average Value of House-room to each Person. Annually.	Average Value of House-room to each Person. Weekly.
							£	£	s. d.
ALL LONDON		66	252	39	30	7·4	40	5·595	2 2
East London	River Lea	69	271	23	69	6·7	23	3·497	1 4
New River and East London	Rivers Amwell and Lea	29	197	55	13	5·9	25	4·397	1 8
New River	Rivers Amwell and Lea	48	260	54	100	8·1	51	6·638	2 7
New River, Hampstead, and West Middlesex	Rivers Amwell and Lea, by springs on the hill at Hampstead, and by the Thames at Hammersmith	23	222	80	60	8·8	41	4·871	1 10
Grand Junction	Thames at Kew-bridge	10	201	56	58	9·1	116	13·331	5 1
Grand Junction, West Middlesex, and Chelsea	Thames at Kew-bridge, at Hammersmith, and at Battersea	38	228	12	10	6·6	33	5·070	1 11
West Middlesex	Thames at Hammersmith	17	234	118	46	9·5	68	7·471	2 10
Chelsea	Thames at Battersea	56	257	9	66	8·0	41	5·309	2 0
Southwark	Thames at Battersea	156	249	10	9	6·5	26	4·133	1 7
Southwark and Lambeth	Thames at Battersea and at Waterloo-bridge	131	249	2	37	6·4	26	4·229	1 7
Southwark and East Kent	Thames at Battersea and River Ravensbourne near Deptford Common	268	277	0	18	5·8	23	4·238	1 8
East Kent	River Ravensbourne near Deptford Common	71	218	12	6	6·5	23	3·704	1 5

This Table affords the means of investigating the effects of elevation of soil (which is a good index to the natural drainage), of density of population, and of poverty—which is expressed by the lowness of the rating of the houses—or still more closely by the average cost per head of house and shop-rent. Arranging the districts in the order of mortality, that from Cholera was lowest in districts which have their water chiefly from the Thames so high as Hammersmith and Kew, and highest in the districts which are supplied from the Thames so low as Battersea and the Hungerford-bridge. The Registrar observes:—"For those unacquainted with the Thames, it is necessary to state, that the contents of the greater part of the drains, sinks, sewers, and water-closets of 2,200,000 people, after stagnating in the sewers, are poured daily into its waters, which spread over more than 2000 acres in the midst of the inhabited parts, and are incessantly agitated by the tides, which ascend to Teddington, and carry the matters in the thickest waters below London-bridge, and a mile and a half above Battersea-bridge, twice a day. The large Chelsea sewers open into the Thames above the point at which the water is taken up from the Thames by the Southwark and Chelsea Water Companies; but the suction-pipe of the Chelsea Company extends into the centre of the stream. The water, it is said, is filtered by all the Thames Water Companies."

Deaths in the Week ending Saturday, Jan. 5, 1850.

CAUSES OF DEATH.	Total.	Average of Ten Weeks.
ALL CAUSES	1133	1150
SPECIFIED CAUSES	1126	1142
Zymotic (or Epidemic, Endemic, and Contagious) Diseases	179	227
SPORADIC DISEASES:		
Dropsy, Cancer and other Diseases of uncertain or variable seat	54	62
Tubercular Diseases	185	174
Diseases of the brain, Spinal Marrow, Nerves, and Senses	146	138
Diseases of the Heart and Blood-vessels	42	36
Diseases of the Lungs, and of the other Organs of Respiration	232	228
Diseases of the Stomach, Liver, and other Organs of Digestion	63	64
Diseases of the Kidneys, &c.	15	8
Childbirth, Diseases of the Uterus, &c.	6	10
Rheumatism, Diseases of the Bones, Joints &c.	10	8
Diseases of the Skin, Cellular Tissue, &c.	1	1
Malformations	4	2
Premature Birth and Debility	31	23
Atrophy	17	13
Age	69	72
Sudden	22	21
Violence, Privation, Cold, and Intemperance	49	43
Causes not Specified	7	7

The following is the number of Deaths occurring from some of the more important special causes:—

Apoplexy.....	37	Heart	40	Phthisis 129	
Bronchitis ...	103	Hooping-cough	23	Pneumonia ...	95
Cholera.....	1	Hydrocephalus	40	Scarlatina	31
Childbirth	2	Influenza	5	Small-pox	8
Convulsions...	31	Liver	9	Stomach	6
Diarrhœa	8	Lungs	9	Teething	12
Dropsy	20	Measles	33	Typhus	36
Erysipelas ...	12	Paralysis	43	Uterus	1

BIRTHS AND DEATHS.

	Births.	Deaths.	Births over Deaths.
Males	816	578	238
Females	726	555	171
Total.....	1542	1133	409

METEOROLOGY OF THE WEEK.

Day.	Mean of Barometer.	Mean of Thermometer. Dry.	Ditto. Dew Point.	Difference between the Mean Temperature of the day and the same day on an average of 7 years.	General Direction of Wind. A.M.	General Direction of Wind. P.M.	Rain in Inches.	Amount of Horizontal Movement of the Air.	Electricity.*
Sunday	29·999	33.5	27·3	— 5·2	N.	P.M. N.	0·00	Miles. 115	Nothing.
Monday.....	29·956	34·3	28·1	— 4·7	N. by W.	N.N.W. & W.	0·00	95	Nothing.
Tuesday.....	30·137	31·3	27·9	— 7·0	W.S.W.	W.	0·00	34	P. and tension weak.
Wednesday.	30·132	33·6	29·8	— 4·0	W.	W. by S.	0·00	10	P. and tension variable.
Thursday...	30·027	37·6	35·3	+ 0·7	W. by S. & S	S. and S.W.	0·00	155	P. and tension moderate.
Friday	29·492	43·4	39·0	+ 7·0	S.W.	S.W.	0·00	180	Nothing.
Saturday ...	29·326	34·0	28·1	— 2·2	S.W.	S.W.	0·00	50	Nothing.
Means ...	29·867	35·4	30·8	— 2·2			sum 0·00	sum 639	

* In this Column, A. stands for Active; N. for Negative; and P. for Positive.

MEDICAL NEWS.

OBITUARY.—On the 2nd ult., Sir David James H. Dickson, late Inspector of Hospitals and Fleets. On the 14th November, at Meerut, E. I., Dr. Thos. C. Elliott, 6th Bengal Light Cavalry, aged 54. On the 5th inst., at Ilfracombe, Jesse Foot, surgeon, late of Jamaica, aged 70.

NAVAL APPOINTMENTS.—John Gibson, surgeon superintendent, to the Scindian; John Campbell, Surgeon to the Gladiator steam frigate; John Rorie, (1849,) Assistant-Surgeon to the Gladiator. John Macleod, M.D. (1847), Surgeon, and Thomas Seccombe (1845), Assistant-Surgeon, to the Hermes steam-sloop.

THE MEDICAL SOCIETIES OF LONDON.—There is a rumour abroad of an approaching coalition between the Westminster Medical Society and the Society of London, the latter being the oldest Medical Society in the metropolis, and in possession of a valuable library of old medical works, some of which are not to be found in the library even of the College of Surgeons. It is not impossible that another Society may be amalgamated with these two. The junction of these societies will be a decided advantage, and were they, in addition to the weekly papers and discussions, to combine some of the advantages of a club, the attraction would be almost irresistible. A reading-room, with the newspapers, journals, the best magazines and reviews, and the possibility of obtaining refreshments at moderate charges, would constitute advantages such as would be greatly appreciated. While the heads of these societies are preparing the preliminaries of their union, it would be as well if they were to take into consideration the possibility and propriety of combining these additional alterations and improvements.

APPOINTMENT.—W. O. Markham, Esq., M.D., has been elected Physician to the Western General Dispensary, in the place of Dr. Day, resigned.

THE IODIDES OF MERCURY.—Of all the mercurial preparations, and of all the remedies of whatsoever kind, which have been recommended in the treatment of the syphilides, none can approach, in therapeutic value, the iodides of mercury. We are indebted to Biett for the introduction of these valuable remedies in the treatment of the venereal eruptions. This Practitioner at first preferred the biniodide, and administered it in pills of the following form:—Biniodide of mercury, ten grains; liquorice powder, one drachm; make sixty pills. Dose, from two to three *per diem*. But he soon relinquished this preparation for the more manageable and more efficient proto-iodide of mercury. This is, undoubtedly, one of the most valuable remedies we possess; and it is certainly that under the influence of which we can almost invariably modify, if we cannot cure the syphilitic eruptions. This agent seems to acquire a double value from the combination of iodine with mercury. In the great majority of cases it is borne easily by the patients, and may be continued for a considerable period without causing any inconvenience.—*Dr. Burgess on Eruptions of the Face, Head, and Hands.*

HEREDITARY INSANITY.—Some time ago the daily papers contained an account of two homicides committed by two young French gentlemen, the brothers Montesquieu, at St. Louis, U.S., where they had just arrived. Two young men were killed by them, and others severely wounded before they could be secured. Such was the popular excitement in consequence, that the prisoners were removed to the military barracks for protection. Their manner at the time showed evident indications of insanity, but it appears that their conduct during their previous travels in the United States was perfectly correct and proper. Letters have since been received in America, addressed to Senators Benton, Winthropp, and Cass, stating that their late father (Count Montesquiou) laboured under insanity, and committed suicide two years since, and that their elder brother is now insane in Paris. Evidence such as this, we presume, must eventuate in the acquittal of the unfortunate brothers.

MIDWIFERY.—About five months ago considerable sensation was created in Sheffield by the publicity given to the extraordinary conduct of an elderly woman of the name of Hannah Cushforth, one of the midwives of the Sheffield Public Dispensary, displayed during the exercise of her vocation in the case of Harriet, the wife of Francis Mappin, a file forger. On the 27th of June, Mrs. Cushforth, some time in the afternoon, commenced the critical operation which she had undertaken. So unsuccessful were her efforts, that she separated the body of the infant from the head, and afterwards made a barbarous use of a common meat-hook as an instrument to aid her in the completion of the operation. The agonised mother began to sink under the treatment, when Mr. Moore, surgeon and druggist, who had been fetched by a neighbour, arrived, and speedily completed, at about six in the evening, that which the midwife had so unskilfully attempted. Mrs. Mappin afterwards revived, and ultimately recovered. An investigation took place, and the result was that the jury found Mrs. Cushforth guilty of manslaughter in respect of the infant. She was committed to York for trial. Before the bill of indictment had been presented to the Grand Jury, however, the learned Judge, who had looked over the depositions, intimated to the conductors of the prosecution that he did not think it possible that the evidence would bear out the charge of manslaughter, inasmuch as it could not be proved that the infant was alive when the midwife undertook the case. His Lordship, therefore, advised that the prosecution should be abandoned. The hint was at once adopted, and the consequence was, that on Thursday Mrs. Cushforth was discharged from custody after an incarceration of nearly five months.—*Bedford Times.*

TO CORRESPONDENTS.

"Civis."—We strongly suspect our correspondent labours under some mistake. We doubt if he is, as he imagines himself to be, doubly blessed. Four of the organs spoken of fall to the lot of no one man. We should advise him to take the opinion of a surgeon on whose judgment he can rely. Above all, let him not be led by any false modesty to seek the aid of quacks, or he may bitterly rue his folly. Avoid a man who advertises as a plague. Depend on it, no medical adviser thinks a question which eases the mind of his patient unworthy of an answer.

"Mr. Ramsbotham."—Press of matter has compelled us to postpone the consideration of the alleged case of hydrophobia till next week. Mr. R. must be aware that if he has not vaunted the case, his homœopathic friends have for him, and that in no modest terms. The case either was or was not one of hydrophobia—if the former the man would have died had not Mr. R. taken charge of the case—if the latter, the man would assuredly have recovered if he had been left to himself. Either Mr. R. has covered himself with glory, or there has been somewhere a mighty fuss about nothing.

We have not received Dr. Fleetwood Churchill's book on the Diseases of Children. We never accept volunteer reviews; and we have received two of the Work in question, which, when it comes to hand, will be noticed in due course.

We have much pleasure in announcing we shall next week publish, with an engraving, a case of morbus coxarius of six years' standing, in which Professor Fergusson's operation of excision of the head of the femur was successfully performed by Dr. Edwin Morris, of Spalding, Lincolnshire. It is a matter of great congratulation to observe the extension of sound surgical knowledge in the provinces, and it must be highly gratifying to the London College of Surgeons that their country Fellows reflect so much credit upon that Institution. In Leeds, also, Mr. Smith, the Senior Surgeon to the Infirmary, has lately operated for cleft palate, the details of which case we also trust next week to lay before our readers.

"Mr. Scattergood's" request will be complied with. We trust frequently to hear from him.

The commission of a Paris Correspondent has been executed.

"Mr. Chard's" (Wye, near Ashford), case of congenital malposition of the viscera will be published as soon as the illustrative engraving can be prepared.

Our sense of justice will induce us most assuredly to comply, and that at the earliest opportunity, with the request of "a *Magistrate of Gloucestershire.*"

"An Unitiated" is entreated, if he values either his health or his purse, to avoid the person to whom he alludes—a person we believe to be a member of the Apothecaries' Company, but still a most unmitigated quack—of whose failures we do not hear, and the secret of whose success is that "fools rush on where wise men fear to tread."

We fancy the proposed regulation to which "Iago" alludes will affect candidates for the fellowship, and not for the diploma.

We are requested, by a valued correspondent, to inquire of our readers where any information can be obtained relative to the transmission of gases through perforated plates. Our correspondent has some reason to conclude, from experiments, that the molecules of different gases are of different sizes, and that bearing some relation to the specific gravity of the gas. Perhaps some of our chemical readers will favour us with a few words on the subject.

We have once for all to request, that books for review may be SENT to us through our publishers.

"Quæso" writes:—"Do me the favour, at your early convenience, to answer me the following query in your column 'to Correspondents.' A benefit club of 100 members, young and middle-aged, in a healthy district, wishes to have a medical man attached. He is to be paid by a contribution from each member, sick or well. What do you think is the minimum sum per head, yearly, which a respectable practitioner of good standing, (say thirty years M.R.C.S.,) would be justified in accepting, with due regard to his status and that of his Profession?"

[This is a difficult question to reply to satisfactorily. The matter is almost one of taste, and depending on a variety of circumstances. We refer it to our readers.]

"Mr. McClure's" reply to Mr. Chubb and Dr. Miller was received too late for insertion in this week's Journal.

"A Constant Reader."—Next week. Communication received too late for reply in the present Number.

ORIGINAL LECTURES.

LECTURES
ON
THE CHEMISTRY OF THE POISONS;
OR, ON
PRACTICAL TOXICOLOGY.

SHOWING THE APPLICATIONS OF CHEMISTRY TO THE DISCOVERY OF CRIME.

By H. LETHEBY, M.B., Lond:
Lecturer on Chemistry in the Medical College of the London Hospital.

LECTURE XII.

Characters of the Nitrates.—Their Solubility in Water.—Action upon Alkaline Carbonates, their Taste, Crystalline Forms, Tests, &c.—Delicacy and Fallacies of these Tests.—Quantitative Determination of Nitric Acid; 1st, When in a Free State; 2ndly, When Combined.—Pelouze's Process.—Nesbit's Process.—Rose's Process.—Taylor's Process.

At the close of the last Lecture, gentlemen, we were occupied in considering the tests for free nitric acid. I have now to direct your attention to the properties and re-actions of this acid when it exists in a state of combination.

CHARACTERS OF THE NITRATES.

All the neutral salts of nitric acid are freely soluble in water; hence it is that we have not any test or re-agent excepting albumen, which possesses the property of furnishing a precipitate with a solution of aqua fortis.

Boiled with carbonate of potash, all the nitrates, excepting those of soda and ammonia, are easily decomposed, and converted into nitre and an insoluble carbonate of the complementary base. The two nitrates, with which you ought to be very familiar, are those of potash and soda. They are known by their cooling saline taste, and by their forming very characteristic crystals when their solutions are evaporated on a slip of glass; for saltpetre crystallizes in long fluted or six-sided needles, which do not undergo any change on being exposed to a damp atmosphere, while the corresponding salt of soda assumes the form of minute rhombs, or of rhombic prisms, which are very deliquescent. Both of these salts display the phenomenon of deflagration when they are thrown on red-hot carbonaceous matter; and if they are acidulated with sulphuric acid, and tested in the manner referred to in the last Lecture, they exhibit all the re-actions which characterise the presence of free nitric acid

Such is the extreme delicacy of these tests, that a quarter of a grain of saltpetre, containing only the 13-100ths of a grain of dry nitric acid, is amply sufficient for the manifestation of all the re-actions to which I have just alluded. We will, in fact, proceed to demonstrate the truth of this.

Here are 25-100ths of a grain of powdered nitre, of which you are to take about a fourth part; and by carefully dropping it on a piece of ignited coal, you will perceive that it deflagrates, without evolving any violet-coloured vapours.

The remaining three-fourths of the salt are to be introduced into a test-tube with 20 drops of strong pure oil of vitriol, and you will notice that the salt quickly dissolves without acquiring a red colour, without exhibiting any sign of effervescence, and without liberating any fumes of chlorine or of bromine. To this acid liquor you are to apply the following tests:—

Put 10 minims of dilute sulphuric acid into a test-tube, and tint the liquid of a pale blue colour by means of a little sulphate of indigo, then add a couple of drops of the acid solution of nitre, and apply heat. In a few minutes, generally long before the liquid boils, the blue colour of the indigo will be discharged.

Dilute the remainder of the acid liquor with its own bulk of water, and divide the mixture into three equal portions. To one portion carefully add a drop or two of a solution of protosulphate of iron, and, if necessary, apply heat, when you will obtain the peculiar olive brown colour to which I have already referred.

Into a second portion of the liquid, introduce, by means of a glass-rod, a little brucia, strychnia, or morphia. If no discoloration take place, cautiously heat the mixture, and you will then get the rose or blood-red colour which is so characteristic of nitric acid. Lastly, to the third portion add a grain of copper filings, and place over the mouth of the test-tube a piece of paper moistened with a solution of starch and iodide of potassium. On applying heat to the liquid, so as to make it boil pretty actively, nitrous acid and binoxide of nitrogen will be set free. These gases will instantly decompose the iodide upon the paper, and stain it of a violet brown colour. In performing this experiment you are particularly to notice that the liquid does not evolve any violet-coloured fumes. It is, I hope, hardly necessary for me to caution you against the employment of impure sulphuric acid; or again to tell you, that the oil of vitriol is to be carefully examined, by submitting it to the action of every one of these tests, before you think of resorting to it as a decomposing agent for the nitre. And should it, when it is thus treated, exhibit the presence of even a trace of nitric acid, it is to be purified by introducing a fluid ounce of it into a flask with ten drops of liquor ammoniæ, and then boiling the mixture for a period of ten or fifteen minutes, by which means the sulphuric acid will in most cases be deprived of every trace of the impurity in question.

Again, it is my duty to remind you, that the re-actions which you have just witnessed are not altogether peculiar to the nitrates, but that they are common to the salts of all those acids which contain a large proportion of oxygen. Hence it is that the chlorates, the bromates, and the iodates will, when they are treated like a nitrate, deflagrate upon red hot charcoal; that they will decompose and redden brucia, strychnia, and morphia; and that they will decolorise a solution of sulphate of indigo. It has been remarked, moreover, that these salts, when they are re-acted upon by sulphuric acid and copper, will evolve gases which have the power of decomposing and discolouring a mixture of starch and iodide of potassium; and, lastly, it has been noticed that the iodates, like the nitrates, have the faculty of communicating an olive-brown tint to a solution of green vitriol. How, therefore, you will say, are such important sources of fallacy to be avoided? I will answer this question by showing you how they are to be detected.

In the first place, the chlorates and the bromates of the alkalies are instantly rendered of a blood-red colour, when they are brought into contact with strong sulphuric acid. Moreover, they effervesce when they are thus treated, and evolve gases by which they are easily known. The chlorates, for example, evolve the fumes of chlorine and hypochlorous acid—two gases which are to be recognised by their greenish-yellow colour, by their odour of chloride of lime, and by their faculty of bleaching litmus paper; while the bromates, when thus acted on, set free the deep red vapour of bromine, an elementary body, which has a most acrid, unpleasant, and suffocating odour.

Secondly, an iodate is known by its evolving the rich violet coloured fumes of iodine, both when it is deflagrated on red-hot charcoal, and when it is heated in a tube with copper and sulphuric acid.

All these characters will be sure to present themselves during your inquiries into the nature of the suspected nitrate, and, as they are so very evident and distinctive, you can hardly fail to recognise them.

Before I leave this part of the subject, I ought, perhaps, to inform you that Professor Penny has proposed the use of nitric acid as a means of distinguishing these fallacious salts; for, according to this authority, while strong aqua fortis is entirely without action upon the nitrates, yet it decomposes the chlorates, bromates, and iodates, and causes the liberation of those characteristic vapours of chlorine, bromine, and iodine. He states, however, that the aqua fortis must, in some cases, be boiled upon these salts, in order to produce the necessary changes.

QUANTITATIVE DETERMINATION OF NITRIC ACID.

When a pure solution of free nitric acid is presented to you, nothing is more easy than the determination of its strength; for by taking the specific gravity of the liquid, and then referring to the table already at your disposal, you may read off the amount of dry nitric acid contained in it. Or, secondly, the strength of the solution may be estimated by taking a given quantity of it, diluting it until it has a density of 1020, or thereabouts, and pouring it upon a weighed portion of roughly-powdered and well-dried marble or carbonate of baryta. By allowing the acid to act for twenty-four hours, occasionally agitating it, a portion of the earthy carbonate will be dissolved. The mixture is now to be evaporated to about half its bulk. On filtering it, drying the residue of undissolved carbonate, and weighing it, you can estimate, by means of the diminished weight, the amount of free acid present; for every 50 grs. of carbonate of lime, or 99 of carbonate of baryta, so acted on and dissolved, are the representatives of 54 grs. of dry nitric acid, or of 90 grs. of the ordinary tetrahydrate.

Thirdly, the amount of free nitric acid in a solution may be ascertained by saturating it with recently ignited carbonate of soda, every 53 grs. of which will exactly neutralise 54 of dry acid.

It too often happens, however, that the solution to be tested contains other acids besides nitric; it may even contain this acid in combination with a base, and be mixed with various saline and organic substances; in which case, it is not possible to estimate the amount of nitric acid present by any direct mode of analysis, and you will be compelled to resort to one or other of the following processes:—

1st. *Pelouze's Process.*—This process is founded on a property which nitric acid possesses of converting a protosalt of iron into a persalt; and, by using a ferruginous liquor of a given strength, and then testing it with a standard solution of permanganate of potash, it is easy to determine how much of the protosalt has been thus acted upon, and hence to deduce the amount of nitric acid present. In performing the analysis, you are to proceed thus: take a known weight, say 10 grs., of pure iron, (harpsichord wire,) and introduce it into a flask with one fluid ounce of concentrated muriatic acid, closing the mouth of the vessel with a cork, pierced with a small hole for the escape of hydrogen gas. Apply a moderate heat to the flask, and, at the moment when the iron is dissolved, introduce 5 grs. of the suspected nitrate. Immediately close the vessel with the perforated cork, and quickly raise the temperature of the liquid to the boiling point. The solution thus treated acquires a deep brown colour, and dense vapours of hydrochloric acid, mixed with binoxide of nitrogen, gush forth from the orifice in the cork. The liquor soon loses its olive-brown colour, and, after boiling for five or six minutes, it becomes yellow, and somewhat transparent. When this appearance has taken place, the liquor, together with the washings of the flask, are to be poured out into a vessel containing half a pint of cold, recently boiled, distilled water, and the mixture is to be immediately tested with a measured quantity of a standard solution of permanganate of potash, the test liquor being added until the mixture assumes a very pale rose tint. This having been accomplished, we have now to calculate from the results, in order to ascertain the amount of nitric acid present. But, before we do this, it is proper that you should be acquainted with the *rationale* of the changes which you have just witnessed.

On introducing the iron wire into the flask with muriatic acid, the metal decomposes the liquid, hydrogen gas is evolved, and an acid solution of protochloride of iron is formed. This solution has a great affinity for oxygen, so much so that it reacts upon the nitric acid of the nitrate and then upon the permanganic acid of the test liquor. Now Pelouze has shown, that one equivalent of nitric acid will react on six equivalents of an acid protochloride of iron, and convert them into three equivalents of a persalt of this metal, the change which takes place being thus represented, $6, Fe Cl, + NO_5 + 8, HCL = 3 Fe_2 Cl_3 + NO_2 + 3HO$, consequently every 168 parts of metallic iron used and so acted on, represent 54 parts of dry nitric acid, quantities which are very nearly in the proportion of 3 to 1. If, therefore, a nitrate be added to a solution which contains a known weight of this metal in the state of an acid protochloride, a certain amount of re-action

takes place, and it is only necessary to have some sure and easy method of ascertaining the quantity of iron unacted on in order to know what proportion of the metal has been sur-oxydized by the nitrate in question, and thence to deduce the proportion of dry acid. This problem has been happily settled by the researches of Margarite, who discovered that permanganate of potash, the test liquor employed, is decolorised so long as any protosalt of iron exists in the solution to which it is added; and if the test liquor is made of a standard strength, so that, for example, 50 parts of it, as measured by a cruet, represent one of iron, it is easy to calculate, from the quantity of the test liquor used in the experiment, how much of the protosalt of this metal remains unacted upon after the operation of the suspected nitrate. To illustrate this, we will go back to our experiment. We have here used 10 grs. of iron and 5 grs. of a suspected nitrate, and it took 200 measures of the test liquor to communicate a pinkish hue to the diluted solution, that is to superoxydize the residual protosalt. Now as the 200 measures of the test liquor represent 4 grains of unchanged iron, it is clear that the other 6 grains of this metal must have been acted on by the questionable salt; and, therefore, to judge from our equation, these 6 grains of iron, as protochloride of iron, are the representatives of 2 grains of dry nitric acid or of 3·4 gr. of the commercial tetrahydrate.

In performing the experiment which you have just witnessed, it is necessary that the re-action between the acid protochloride of iron and the suspected nitrate should take place in the absence of atmospheric air; in fact, if the air gains access to the flask, it will act rapidly on the binoxide of azote, and, by forming nitrous acid, render the liquid capable of peroxydizing a new quantity of iron. Hence the proportion of nitric acid present would be exaggerated; but it is easy to guard against this inconvenience, for, when the iron has disappeared in the acid, the globe is filled with hydrogen and the vapour of hydrochloric acid. By taking advantage of this circumstance, the cork may be removed, and the nitrate introduced without admitting any serious proportion of atmospheric air; and, by rapidly bringing the liquid to a state of ebullition, the flask becomes filled with the vapours of muriatic acid and binoxide of nitrogen, which are evolved in such quantity that they rush out through the opening in the cork, and so prevent the access of atmospheric oxygen.

"I may add," says Pelouze, "that the influence of the air may not be really dreaded until at the moment when the nitrate begins to re-act; for I am certain," continues this author, "of the exactness of Margarite's assertion, namely, that in the centre of a strongly acid liquid, the iron, even when free, is peroxydized in the air, so slowly and with so much difficulty, as not to interfere in a sensible manner with the analysis."

The nitrates may be employed either in a state of solution in water, or in the solid form; but it appears, that this mode of estimating the amount of nitric acid in any questionable matter, is most applicable when that matter is presented to you in the latter condition; and I may state, that the process suggested by Pelouze takes precedence of every other mode of analysis as a correct means of estimating the value of the several alkaline nitrates, whether those nitrates be required for chemical, for pyrotechnic, or for agricultural purposes.

2. *Nesbit's Process.*—This process depends on a faculty which nascent hydrogen possesses, of decomposing nitric acid, and converting its nitrogen into ammonia; for it appears, that when aqua fortis or a nitrate is introduced into a liquid, from which hydrogen gas is being slowly evolved, 8 equivalents of this gas will re-act on 1 equivalent of nitric acid, and will form 5 equivalents of water and 1 of ammonia—thus $NO_5 + 8\,H = NH_3 + 5\,HO$. Now, although the facts connected with these changes have been long since known, and carefully studied by Kuhlman, Dumas, Playfair, and others, yet they have only lately been made available to the purposes in question. This has been effected by Mr. Nesbit, whose process I shall, with some little modification, now exhibit to you. Take a given quantity, say five grains of the suspected nitrate, dissolve it in a little water, and introduce it into a flask with about one hundred grains of clean granulated zinc, cover the zinc with water, and treat the mixture from time to time with a few drops of hydrochloric acid, until nearly the whole of the zinc is dissolved, then set the liquor aside so that it may brighten and become clear. In performing this part of the experiment, you are to take care that the temperature of the liquid does not rise, and that the effervescence occasioned by the acid goes on *slowly and continuously*, for if the re-action is permitted to be too violent, some of the nitrogen will escape either as binoxide, or as nitrous acid.

The liquid having become transparent, is to be poured off from the undissolved zinc, and distilled with about half an ounce of powdered quick lime; by which means all the ammonia generated by the action of the nascent hydrogen on the nitric acid will be set free, and will pass over into the receiver, which is to be kept very cold during the process of distillation.

The ammoniacal liquor thus obtained is now to be submitted to a careful examination, in order to discover the amount of free ammonia contained in it, and hence to calculate the proportion of nitric acid originally acted on. For this purpose Mr. Nesbit makes use of a solution of litmus, and a neutralising acid of known strength. He employs dilute sulphuric acid of specific gravity 1032·7, 1000 grains of which contain 40 of sulphuric acid, and are, therefore, capable of neutralising 17 grains of ammonia, a quantity which represents 54 grains of dry nitric acid, or 90 grains of the ordinary tetrahydrate.

Again, the proportion of ammonia contained in the liquid, may also be estimated pretty accurately, by precipitating it with a cold saturated solution of bichloride of mercury. The white precipitate thus formed is a compound of mercury, chlorine, and ammonia, and, when it is dried in a water bath, every 136 grains of it are the equivalent of 17 of ammonia, and, consequently, of the before-named quantities of dry and liquid nitric acid.

Mr. Nesbit's process appears to be applicable to the analysis of the alkaline and alkalino-earthy nitrates, and it does not appear that the results of the process are at all interfered with by the presence of the common kinds of saline matter; but, for all this, I am bound to tell you that the process is not altogether free from objection, inasmuch as a portion of the nitrate will sometimes escape decomposition, or be evolved as binoxide of nitrogen; so again it is almost impossible to prevent a portion of the ammonia from being lost during the distillation, both of which circumstances tend to lower the value of the nitric acid in the salt made use of. On the other hand, it is just possible that a salt of ammonia may exist in the questionable matters, and if so, its liberation will lead you to over-estimate the proportion of nitric acid.

Other processes have been proposed for the quantitative determination of this acid in saline substances; thus, Rose recommends that the alkaline nitrates should be distilled to dryness with dilute sulphuric acid, and the distilled product saturated with hydrate of baryta, in order to estimate the quantity of free acid present; but it is needless to state that the presence of muriates, acetates, and some other salts, will entirely vitiate the results.

Again, Mr. Taylor tells us to convert the nitric acid, contained in a measured quantity of the liquid, to nitre, and then to convert this nitre into sulphate of potash, from the weight of which, after ignition, the amount of nitric acid is to be calculated. But, in proposing this process, no regard whatever has been paid to the circumstance that nitric acid may exist in the liquid in conjunction with many other salts or salt-forming substances, and hence the process is totally inapplicable to the ordinary subjects of inquiry. Altogether, it reads very like Mrs. Glass's receipt about catching the hare and then cooking it.

With this I finish the chemistry of nitric acid, and, in my next lecture, I shall proceed to apply the facts which we have elicited to the discovery of nitric acid in the tissues and fluids of the animal body.

ERRATUM.—In Lecture XI., at page 501, col. 1, line 39, for "*with a few grains of sulphur*," read, *a few grains of sulphate of ammonia.*

ORIGINAL CONTRIBUTIONS.

ON THE

TREATMENT OF ACUTE PERICARDITIS;

ESPECIALLY ON THE

EFFECTS OF BLOOD-LETTING AND MERCURY IN THAT DISEASE.

By JOHN TAYLOR, M.D.,

Fellow of the Royal College of Physicians in London, and Physician to the Huddersfield Infirmary. Formerly Professor of Clinical Medicine in the University College, London.

In the year 1845, I submitted to the Royal Medical and Chirurgical Society of London, a paper upon the Causes of Pericarditis, which was published in the 28th Volume of their Transactions. That paper was the result of an analysis of all the cases of pericarditis which had fallen under my own observation up to the time when it was written. In the present communication I propose to make some observations upon the treatment of the same disease, deduced from an analysis of the same cases, together with one or two others which have since occurred to me.

The cases analysed are forty in number. They were published in the Volumes of the *Lancet* for the years 1845 and 1846. In order to facilitate the verification of any statement made in the course of the following investigation, I have very frequently given references to the individual cases, and, whenever I have done so the Number of the case will be found to correspond with the Number attached to it in the publication referred to.

Two cases (33 and 34) I exclude from all consideration, because I never saw the patients during their life-time, and have no accurate history of their illness.

Mortality.—Of the 38 remaining patients, 17 recovered and 21 died.

In 9 at least of the fatal cases, the pericarditis had little or nothing to do with the death; the disease being in several very insignificant (Nos. 7, 28, 39), and in others it was cured (27, 30, 36). All these 9 patients died of other serious diseases. One of hæmorrhage into the brain (27), several of coma (26, 31, 36), two of great organic disease of the heart, &c. (24, 39), and the rest of other diseases.

Upon further careful examination, I have found several important features, in which the two classes of patients, those recovering and those dying, differ from each other.

1. *Form of the Disease.*—All the patients who recovered had pericarditis in connexion with acute rheumatism, and none of them were ascertained to have disease of the kidneys.

Of the patients who died, two-thirds were known to have disease of the kidneys, and of the rest there is no sufficient information respecting the state of the kidneys. On the other hand, three only had acute rheumatism, and one the rheumatic diathesis.

All those cases which were complicated with renal disease were fatal, whereas four only of the rheumatic cases were fatal.

My cases, however, would not warrant the inference that *all* cases of renal pericarditis are fatal. Some of the patients did not die of the pericarditis, but of other serious affections often found in connexion with disease of the kidneys. Neither did the four patients who had rheumatism die of the pericarditis alone. In one (No. 7) the pericarditis was trifling, and had nothing to do with the result. In a second, (No. 2,) there was also severe endocarditis and pleuritis, and the inflammation of the pericardium appeared to have been cured. In a *third*, (No. 1,) there was also pleuro-pneumonia, and the kidneys and urine were not examined, and may, therefore, have been diseased. In the *fourth*, (No. 19,) there was also severe endocarditis, pleuritis, and pneumonia. The kidneys, likewise, were found to be larger than natural. These facts have suggested to my mind the following question, which I submit to be answered by any persons possessed of the required facts, viz.:—Is rheumatic pericarditis ever fatal, when occurring in a subject previously free from renal disease, and otherwise healthy, and when it is not complicated in its course with any other important affection? All my observations support a negative answer to this inquiry;

but a much larger number of cases would be required to settle the point.

2. *Previous Health of the Patients.*—Of the 17 patients recovering, 16 were previously either in *strong*, or in very fair health; (2 of the 16 had some morbus cordis); 1 had phthisis, with considerable hypertrophy of the left ventricle of the heart, and mitral valve disease. Of the 21 who died, 19 were previously in bad, and most of them in very bad, health; 2 were in pretty good health before the fatal illness, (Nos. 2, 40.) In the latter of these two, the pericarditis was caused by *phlebitis*, (a) and was accompanied by collections of pus in the substance of the heart and lungs, and in the pleuræ.

		Years.
3. *Ages.*—The mean age of the	17 recovering was	19·7
	21 dying.....	35·5

The mean age of the patients who died, therefore, was nearly double that of those who recovered.

Complications.—Under this head are included all the diseases which co-existed with the pericarditis, except rheumatism and Bright's disease of the kidneys, whether they existed before it, or supervened during its course.

The number of *different* diseases was, in the cases recovering, 11, and in those dying, 36. Adding together the *individual cases* of each complicating disease, they amount to 29 in the cases recovering, and 78 in those dying.

The following diseases were nearly equally common in the two classes:—Acute endocarditis; pneumonia, single and double; bronchitis; old valvular disease of the heart.

The following diseases were more common among the patients dying:—Pleuritis, with or without empyema (13 cases to 2). Hypertrophy of the heart (9 cases to 3).

Lastly,—Certain diseases occurred only in the fatal cases; viz., lobular pneumonia, abscesses in the lungs, phlebitis, acute peritonitis, meningitis and carditis; abscesses in the substance of the heart, dysentery, apoplexy, coma, anasarca, hydrothorax, ascites, diseased liver, cancer.

(a) In my communication on the causes of pericarditis, I showed, that only two generic causes had been present in my cases, viz., some alteration in the composition of the blood, and extension of inflammation from a neighbouring tissue to the pericardium. I stated, also, that rheumatism, Bright's disease of the kidneys, and cyanosis, were the only blood diseases causing pericarditis, which I had *observed*; but I intimated, further, my belief, that other blood diseases would be found to produce the same effects.

The case referred to in the text, has occurred to me since my former observations were written. It was a case of phlebitis, leading to inflammation, with effusion of sero-purulent fluid into the pericardium, and to inflammation of both pleuræ. There were also disseminated abscesses in the lungs and in the substance of the heart. I have examined a considerable number of cases of phlebitis published in Mr. Arnott's paper,* and also in M. Dance's Essay;† and among them I have found several in which pericarditis, as well as inflammation of other serous membranes, appears to have been induced by the phlebitis. In my remarks upon the case, as published in the *Lancet*,‡ I have given my reasons for believing that *disseminated* abscesses both in the lungs and heart, occur chiefly, if not exclusively, in cases characterised by some infection of the blood, and generally by the admixture of pus with the blood.

In Vol. XXX. of the Transactions of this Society, a paper has likewise been published by Dr. George Burrows, in which several cases of *tubercular* pericarditis are detailed. Whether the tubercles be the cause or the consequence of the inflammation, there can be little doubt that they result from that condition of the general health which has been denominated tubercular cachexia, a condition consisting, most probably, in a depraved state of the blood.§ According to this view, both *tubercular* and *phlebitic* pericarditis, may be referred to the generic cause pointed out in my communication—a morbid condition of the blood.

* Medico-Chirur. Trans., Vol. XV.

† De la Phlébite considerée sous le rapport de causes, &c. Archives Gener. de Medic. Paris, 1828-9.

‡ *Lancet*, Vol. II., 1846, p. 476.

§ See Louis Traité sur la Phthisie. 2nd Edit., Pp. 155-6, and p. 280.

The complications, therefore, were twice as numerous, and comprise three times the number of different diseases in the patients dying as in those recovering.

These facts exhibit, conspicuously, the important influence which is exercised upon the favourable or unfavourable termination of pericarditis by the form (or the *cause*) of the disease, the previous good or bad health, and the age of the patient, and the number and more or less serious character of the complicating diseases. They seem to render the conclusion very probable, that these circumstances influence the result much more powerfully than any difference in the treatment which has been adopted. It would appear, indeed, that pericarditis occurring in connexion with rheumatism, and in a patient previously healthy, will generally terminate favourably; whilst the same affection occurring in connexion with renal, or other serious constitutional disease, and treated by the same physicians, and, therefore, as far as the cases will permit, in the same way, will almost always terminate unfavourably.

These results have an important bearing upon the question now to be investigated,—the influence of remedial measures upon the progress of pericarditis. It is obvious that all conclusions respecting the effects of remedies drawn from cases which have not been classified according to the previous and existing state of health, and the age of the patients, must be utterly valueless. The very same plan of treatment will appear to be highly beneficial, or altogether useless, according as these distinctions are observed or neglected.

In endeavouring to estimate the effects of the treatment employed, I shall divide the cases into two classes, as follows:—

Class 1. The cases occurring in connexion with acute rheumatism. These cases coincide, except in a single instance, with those supervening in persons previously in good health.

Class 2. The cases occurring in connexion with renal disease, or in persons previously in a bad state of health. To these is added one case arising from phlebitis. This division of the cases agrees, substantially, with that which I adopted in my former paper upon the causes of pericarditis.

In each class the cases terminating in recovery and in death will be considered separately.

The treatment employed in the various cases consisted of bleeding, general and local, purging, mercury, opium, tartarised antimony, and blisters. My observations, however, will refer principally to the effects of the bleeding and mercury, because it is in relation to the effects of these agencies only, that the facts in my possession are of sufficient value to merit more than a passing notice.

The effects of any remedy are to be estimated, chiefly, by the comparison of a series of cases in which it was used with another series in which it was not used, in respect to the ratio of mortality, the duration of the disease, and the relief of particular symptoms, care being taken that the cases shall be as much as possible alike in intensity, in the other remedies employed, and in all other respects, except the use or not of the remedy to be tested. This is the method of investigation which I propose to adopt, as far as the cases in my possession will avail for the prosecution of it.

OF THE EFFECTS OF BLEEDING IN PERICARDITIS.

1. *Effect upon the Ratio of Mortality.—Class* 1.—This includes 21 patients, of whom 4 died, or 1 in 5. If we exclude one case, however, in which the pericarditis was trifling, and had, probably, no share in producing the unfavourable termination, the deaths will be 3 in 20 cases, or about 1 in 7.

Of the 17 who recovered, all were bled; 14 by venesection or cupping, 3 by leeches only.

In the 3 fatal cases the death cannot be ascribed to any want of blood-letting, as compared with the cases recovering. In one case (No. 2) the patient was young, aged 15, not strong for his age; he lost 25 oz. of blood from the arm, and had 35 leeches applied within the first five days of the disease. No further loss of blood could have been borne. The case was complicated with severe acute endocarditis and pleuritis. In a second case (No. 1) the patient was bled as much as his strength would warrant, viz., to 16 oz., five days before the pericarditis appeared; then he was cupped the first day of the disease, and had 20 leeches on the second day. His strength was not good; he had pneumonia; death occurred after 72 hours. In the third fatal case (No. 19) the only blood drawn was by the application of six leeches, on two separate occasions. The girl was anæmic, and could not bear more. The pericarditis was severe and universal, accompanied with a copious effusion of bloody serum, and was complicated with severe acute endocarditis, pleuritis, lobular pneumonia, and enlargement of the liver and spleen. The patient lived a fortnight after admission; it is uncertain how long the disease existed before. It may have been going on for three weeks, and whatever the time was, no treatment had been employed.

The two last cases might probably, with equal propriety, have been placed in Class 2, on account of the previous unsatisfactory state of the general health.

Class 2.—This class comprises 17 cases, all of which were fatal. Of these 9 were bled; 7 by venesection or cupping, and 2 by leeches only. The remaining 8 (being about one-half) were not bled at all. In six of them the disease was not detected during life; and in the other two bleeding was inadmissible.

Thus, all the patients in Class 1 were bled, and only half those in Class 2. 1 in 7 died in the former class, none recovered in the latter. But there is no reason to suppose that this difference in the mortality is due to the use or omission of bleeding, or to any other difference in the treatment. Reasons have already been assigned for ascribing it to the *form* of the disease, and the unfavourable age and general health of the patients.

Of the 6 patients in whom the disease was not detected, 3 at least (No. 36, 39, 40) could not have been bled, if the diagnosis had been more perfect. Of the remaining 3, 1 (No 30) died of severe endocarditis and its consequences. The pericarditis had terminated in adhesion, and there was extensive disease in other viscera. In a second, the pericarditis supervened in the course of old-standing and extensive emphysema; and it lasted for twelve weeks in circumstances forbidding active treatment. In the third case (No. 35) universal adhesions had occurred, but the patient died of extreme dilatation of the heart, and consequent embarrassment of its action, due apparently to the pericarditis. This is the only one of the patients not bled, in whose case it seems *possible* that active treatment might have been of service.

Of the cases in which bleeding was employed, two only deserve special notice. The subject of one (No. 32) was five days ill before admission without treatment. He died on the fifth day after admission, as much depletion having been employed as he could bear. The pericardium was distended with serum, and there was also severe double pleuro-pneumonia. It is *possible* that early and free venesection might have led to a different termination.

The other case, (No. 27,) although fatal, tends to show the good effects of depletion. The pericarditis probably commenced about the time of the patient's admission. 20 oz. of blood were taken from the arm the first day, and 44 oz. within the first three days; 24 oz. more were taken afterwards by three cuppings, between the sixteenth and twenty-third days. The patient died after about twenty-eight days. The pericarditis appeared to have been cured. He died of hæmorrhage into the brain. He had also renal disease, pleuritis, pneumonia, erysipelas, and enlargement of the heart

From what has been said, it seems to follow, that of all the twenty-one fatal cases, there are only three in which there exists the smallest probability that the unfavourable termination might have been averted by the earlier or more copious abstraction of blood. (Nos. 19 in class 1, and 32 and 35 in class 2.)

2. *Effect of bleeding upon the duration of Pericarditis.—Class* 1.—All the patients in this class having been bled, I have no means of comparing the duration of a series of cases in which bleeding was employed, with that of another series in which it was omitted. But, the benefit of bleeding will ap-

pear, by comparing the cases in which it was employed early, with those in which its use was longer deferred.

The duration of pericarditis can be determined, in most instances, with more certainty than that of most diseases, by means of the physical signs. When sought for, either a friction sound, or the signs of liquid effusion, will be found, except in a very small number of cases. The *commencement* of the disease, in my cases, has several times been dated earlier than the occurrence of a friction sound, when the general and local symptoms were present, and there had been no opportunity of examining the heart. In two cases a *slight* friction sound continued for some time, after all pyrexia, and every other symptom of the inflammation had disappeared. In respect to the effects of treatment, these cases have been regarded as cured, from the time when all the other symptoms ceased, and notwithstanding the continuance of the trifling morbid sound just referred to.

In the following Table, the cases are classed according to the day of the disease on which the patients were bled. The fatal cases are not included. The columns of figures in each day's compartment proceeding from left to right, indicate:—

1. The number of the case. 2. The duration of the disease in days. 3. The number of bleedings employed. This includes venesection and cupping. 4. The number of ounces of blood abstracted. 5. The number of leeches applied.

Bled on 1st Day.			
3	10	4	48 50
4	18	1	24 a No.
12	5(1)	—	— 26
14	16	2	16 —
*17	16	1	8 —
8(2)	4	3	36 —
*16	11	3	28 —
Bled on 2nd Day.			
10	10	3	26 —
18	20	—	— 34
Bled on 4th Day.			
6	17(3)	4	62 —
20	18	—	— 20
Bled on 5th Day.			
*9	24	3	46 —
Bled on 8th Day.			
5	24(4)	5	74 —
Bled on 10th Day.			
*18	17	1	4 —

The following were bled *before* the pericarditis came.

No. 15.—Duration 13 days, c. c. to 8oz., day before; v. s. to 10 oz. 5 days after, 20 leeches.

No. 21.—Duration 20 days; v. s. 3 days before to 12 oz.; c. c. 1st day, 4th day, each to 10 oz.

No. 11.—Duration 16 days, v. s. 11 days before to 16 oz., 8 leeches 6 days before, and 8 leeches in 2 days after.

(1.) The pericarditis was suspended in this case during 9 or 10 days. Its duration was 5 days from its return, or 17 days from its first appearance.

(2.) This case *may* have been one of intercostal rheumatism merely.

(3.) The patient appeared to be convalescent on the 17th day; but a slight friction sound continued until the 32nd day.

(4.) The patient appeared to be convalescent on the 24th day; but a little friction sound continued till abouth the 60th day.

* These cases were less severe than the rest.

The *medium duration* of the cases bled on the

1st day was 11, 3-7th days, (or, if Case 8 be excluded on account of its uncertain diagnosis — 13 *days*. If Cases 15 and 23 be added, because of the bleeding just *before* the pericarditis — 14 days.)

2nd day — 15 .. —— (If Case 11 from those bled before the pericarditis be added to these, the average remains about the same.)

4th day — 17½ .. ——

5th day — 24 .. ——

8th day — 24 .. ——

10th day — 17 .. —— (Here was 1 case only. Four oz. of blood were taken by cupping. This, on the 10th day, is, probably, equivalent to no bleeding.)

It appears, therefore, from this Table, that the duration of pericarditis increases, as the number of days increases, between the commencement of the disease and the first bleeding. The effect of bleeding in shortening the disease, will be still more evident, by comparing the medium duration of the cases bled within the first four days, with that of those bled after this period.

Those bled within the first four days had an average duration of about 13 1-5th days; or, including the two cases bled immediately before the disease appeared, 13¾ days. The average duration of those bled later was 21 2-3rd days. The duration of the cases in which bleeding was employed after the first four days, was greater, by *one-half*, than that of those bled before this period.

This difference of duration cannot fairly be ascribed to any important difference in the other circumstances of the cases. The mean *age* of the patients bled early, was somewhat less than that of those bled later; the former being 19½ years; the latter 23 years. The age of both classes is favourable, and the difference is, probably, not important at this period of life, and would be at least compensated by the greater severity of the disease, and of the complicating affections, in the cases bled early. All the patients bled late were salivated, and the treatment of the two classes, in other respects, was not materially different.

The cases bled early, copiously, and repeatedly, other things being alike, ran a shorter course than those in the opposite circumstances.(a)

Case 8 occurred in a young subject, very robust; the disease was intense and uncomplicated. Bleeding was employed the first day; 48oz. of blood were drawn at 4 bleedings, besides the application of 50 leeches. Salivation was produced early. The duration was only 10 days.

Case 8 was supposed to be pericarditis, occurring in a patient whose pericardium was previously adherent. The diagnosis, therefore, from the absence of physical signs, is more uncertain. The duration was 4 days only. Thirty-six ounces of blood were drawn, at 3 bleedings, on the first 3 successive days.

Case 16.—The duration was about 11 days, but the duration of friction sound only 7 or 8 days. Twenty-eight ounces of blood were taken by 3 early bleedings.

Case 10.—Duration 10 days. Bleeding on second day to 10oz., and on 7th day to 8oz. On the 11th day (*i. e.*, the day after the pericarditis ceased) another v. s. to 8oz.

Case 9 may be usefully contrasted with *Case* 3. Both were bled freely, almost equally so; both cases were free from complications; but in this one the bleeding began on the 1st day, in the other on the 5th. The duration of the former was 10, and of the latter 24 days.

Case 5 may likewise be contrasted with *Case* 3. The bleeding was more copious, 74oz. of blood having been abstracted in the first two days of treatment. The first bleeding, however, was on the 8th day. The duration was at least 24 days, and, probably, 32, exclusive of a slight friction sound for a month longer.

Case 18 probably ran the same course as if no bleeding had been employed, seeing that 4oz. of blood only were taken, and that on the 10th day. The duration of the disease was 17 days. The disease was mild.

Case 15.—The patient lost 8oz. of blood the day before the pericarditis began. This did not prevent the accession of the disease, but perhaps shortened its course, for the duration was 13 days only, although the next bleeding was not copious, and not before the 5th day of the disease.

Case 11 was bled also before the pericarditis came, but with a longer interval (11 days) between. Leeches only were employed after. Hence, perhaps, the longer duration—16 days.

Case 23 was bled to 12oz., three days before the pericarditis appeared, and lost 10oz. more blood on the 1st and on the 4th day of the disease. The duration was at least 20 days. It may have been longer, in consequence of the previously impaired health of this patient, who was the subject of phthisis.

The inflammation was not stopped at once by bleeding in any case, however early or copiously it might be employed. In several cases, however, it appeared to be suspended for some days; and it is remarkable that, in each of these cases, local bleeding only had been employed, and that not to a great amount.

In *Case* 10, the disease was suspended for three days immediately after the loss of 10 oz. of blood by cupping, on the second day of the disease, and before the gums were tender.

In *Case* 15, the patient was cupped to 8 oz. the day before the pericarditis appeared. On the first day the disease was suspended for three days. The suspension occurred before the gums were tender.

In *Case* 12, the disease was suspended for about nine days, beginning on the first day, after the application of 16 leeches, and before the gums were sore.

In *Case* 21 (belonging to class 2), the disease was perhaps suspended for 23 days. The suspension occurred on the first or second day after six leeches were applied. When the friction sound returned it continued for 18 days.

The cases do not furnish the means of a satisfactory comparison of the influence upon the duration of the disease, exercised on the one hand by venesection or cupping, and on the other hand by leeches. Several cases were treated chiefly by leeches. In *Case* 12, the disease, we have seen, was suspended for nine days after the application of leeches. On its return, 10 more leeches were applied, and the disease continued only five days more.

In *Case* 13, the patient was young—aged 15—the disease not much complicated. Blood was taken by leeches only; but, although the treatment was begun on the second day, the disease continued 20 days, whereas the duration of Case 10, in which cupping and venesection were used, beginning also on the second day, was only ten days. In the two cases in which the treatment was begun on the 4th day (6, 20), one was bled copiously and generally, the other by leeches only. The duration was nearly the same in each. The patient bled with leeches, however, was anæmic, and would probably be as much prostrated by the local as the other patient was by the general bleeding.

Class 2.—The cases in this class having all proved fatal, do not furnish us with the means of ascertaining the effect of bleeding upon their duration. Nor do they enable us to compare the relative duration of the cases in the two classes.

In *Case* 21, treated by leeches only, the friction sound continued for 18 days after admission, and ceased before the patient's death.

In *Case* 27, 20 oz. of blood were drawn on the 1st or 2nd day, 44 oz. within the 1st three days, and 68 oz. in the whole. The pericarditis continued 28 days; it appeared then to be cured, but the patient died of disease of the brain. The duration of this case was much longer than that of any case in Class 1 treated equally early. This case, together with the two following,—the only ones in which the disease assumed a very chronic form,—may justify the suspicion, that cases accompanied by renal disease have a disposition to continue longer than the rheumatic cases. This is only what might be expected from the greater age, and worse health, of the patients having renal pericarditis. It is possible, however, that the absence of treatment in one, and the late treatment in the other, of the two following cases, may have contributed to produce their chronicity.

Case 22.—Admitted with pericarditis, of what

(a) M. Louis infers that, in his cases, the influence of bleeding was not more marked in the circumstances described than in the opposite ones.*

Of the two series of cases of pneumonia analysed by him, however, it appears that, in the first series, the average duration of those bled within the first four days, was 17 days, the average age being 33 years. The average duration of those bled later was 20 days, and the average age 36 years.

In the second series of cases, the average duration of the cases in corresponding circumstances, was 15½ and 18¾ days, and the average ages 39½ and 47 2-3 years.

The duration of the disease was less in the second series of cases than in the first, although, from the more advanced age of the patients, we should have expected it to be greater. The only explanation that occurs to me, of this more favourable result, is furnished by the fact, that in the cases of the second series, the early bleedings were more copious than in those of the first series.

* Recherches sur les Effets de la Saignée, &c. Paris. 1835. P. 31.

duration uncertain, but the patient had been ill 3 weeks. Bled to 28 oz. in first two days after admission. Died in 11 weeks after admission. Bloody serum in pericardium.

Case 38.—Under treatment for bad emphysema. Pericarditis supervened at least 11 or 12 weeks before death. No treatment. Very thick and rough false membranes in pericardium, which was also distended with bloody serum.

3. *Effect of Bleeding upon the Pain.*—The pain was relieved by venesection, at once, in 3 cases, (5, 8, 16;) by a 2nd venesection, but not by the first, in one case (6).

The pain was relieved by cupping over the heart in *five* cases, (1, 8, 10, 14, 23.) No cases are mentioned in which this mode of drawing blood did not relieve the pain. The abstraction of a very small quantity of blood was sufficient to give relief. In Case 1, four ounces only were drawn.

The pain was relieved by the application of leeches, in *six* cases, (1, 2, 3, 12, 13, 20.) In two cases, the pain ceased for a time, at once, on two successive occasions, when leeches were applied. In one case (19) leeches failed to relieve the pain. In whatever way blood was drawn, the relief of pain was sometimes temporary and sometimes permanent. There seems no reason to believe that any one mode of abstracting blood was more efficacious than another for the relief of pain. It ought to be remarked, likewise, that the cessation of pain did not imply the cessation, nor even the abatement, of the internal inflammation, (Cases 1, 20, 21.)

4. *Effect of Bleeding upon the Pulse.*—An examination of all the cases will justify the general statement, that no amount or form of bleeding reduced the frequency of the pulse until there was other evidence that the inflammation had decidedly abated.

When, as in several cases, the loss of blood was so considerable as to produce decided prostration of the powers of the system, the pulse rose in frequency, and again subsided in proportion as the strength was restored.

5. *Necessity of Caution in Venesection.*—In some cases of pericarditis, even when occurring in very strong and robust men, there is a great disposition to syncope. In these cases the rapid abstraction of a large quantity of blood might, perhaps, prove suddenly fatal. This disposition is illustrated by cases 3, 10, 18, 32. In the last case the pulse was very small, a mere thread, and there was copious serous effusion into the pericardium. There is no necessary connexion, however, between the smallness of pulse, tendency to syncope, and effusion of serum. The two first of these circumstances may be present without the last, and the last may exist without either of the first.

The sudden suspension of the heart's action, which, when temporary, produces syncope only, is, in other cases, permanent, and is, of course, fatal. In either case, it seems especially prone to occur at the time when some sudden movement or change of position is made. In case 19, the patient was turning upon her back, and immediately expired. These facts point out to us the danger of sudden changes of posture in pericarditis, and the importance of avoiding any position, which (as in case 19) has already been found to produce much disturbance of the circulation or respiration.

The following facts, relating to other inflammations, occurring in the course of pericarditis, deserve, perhaps, to be recorded here, in order to show that free venesection does not always prevent the subsequent supervention of inflammation in various organs.

Pleuro-pneumonia came on after pericarditis had ceased, after venesection to 24 oz., leeches, and salivation. (Case 4.)

Pleuro-pneumonia came on the 9th day of the pericarditis, the second day of the treatment, and after two venesections. (Case 5.)

Pleuritis came on the 8th day of the pericarditis, after three venesections, and whilst the patient was salivated. (Case 23. See also Case 2.)

Acute Endocarditis appeared on the 11th day, after two bleedings and salivation. (Case 10. See also Cases 2, 14, 20.)

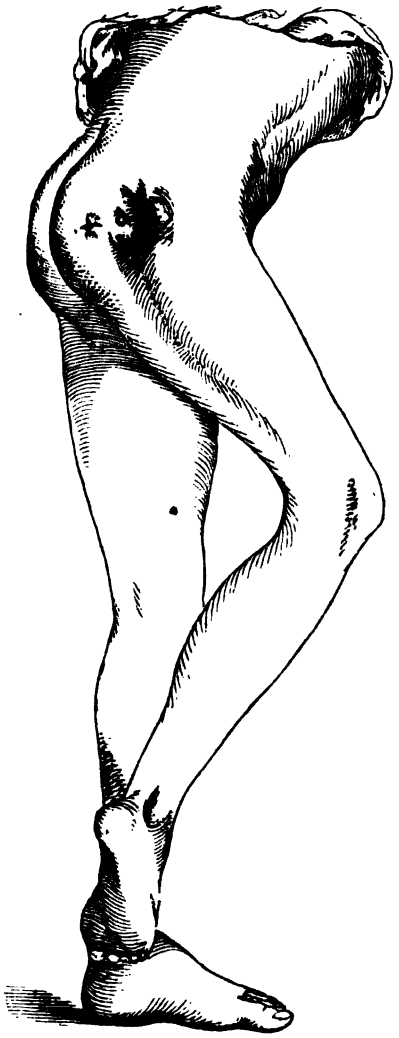
Erysipelas of the face supervened at the end of the pericarditis, and after the loss of 68 oz. of blood, and two salivations. (Case 27.)

[To be continued.]

CASE OF MORBUS COXARIUS OF SIX YEARS' STANDING.

EXCISION OF THE HEAD OF THE FEMUR, SUCCESSFULLY PERFORMED.

By EDWIN MORRIS, M.D., F.R.C.S, &c., Surgeon to the Spalding Union Infirmary, &c.



This Engraving, drawn by Dr. Westmacott, of King's College, shows the condition of the limb before the operation.

George Hughes, aged eighteen years, of strumous habit, was admitted into the Union Infirmary, November 9th, 1849. About seven years ago he had a severe attack of typhus fever, from which he very slowly recovered. Six months after the attack of fever, he first observed a swelling about the right hip, which was very painful and inflamed: poultices were applied, and, after a few days, the abscess gave way, and discharged a quantity of matter; the hip and thigh were so painful, that he was unable to stand upon his leg, or walk with it; offensive matter continued to drain through a fistulous opening for two years, during which time the leg became gradually shortened, and the knee projected somewhat over the left thigh; small portions of bone occasionally came away; the discharge began to lessen in quantity; the pain abated, and the abscess healed up, and continued well for two years, leaving a permanent shortening of the leg; he was unable to bear his weight upon it, and was obliged to walk about upon crutches. In December, 1847, he began to have pain about the hip again, accompanied with swelling, and, after about a fortnight's suffering, it broke, and discharged about half a pint of matter; the discharge has continued more or less ever since; his general health began to fail; he became emaciated, and had profuse perspirations; he had an attack of chorea, which continued during several months; the convulsive movements of his limbs were very violent. He was admitted into the Spalding Dispensary, and underwent a course of treatment for the complaint, and quite recovered, and afterwards had several severe epileptic seizures, which, however, ultimately left him; he is now in a deplorable condition, being very much crippled, and considerably reduced by a constant drain upon his system through fistulous openings communicating with the diseased bone.

Present State of the Limb.—The right thigh is three inches shorter than the other, and the knee is inclined inwards over the left thigh, and the sole of the foot is turned outwards, the great toe pointing to the ground midway between the heel and toes of the sound foot, against which it rests; the heel hangs opposite the lower third of the left tibia, and is exactly seven inches from the ground; the great trochanter projects backwards, and presses firmly against the integuments, as if it would burst through; the distance from the trochanter to the anterior inferior spurious process of the ilium is five inches; immediately below and behind the trochanter are three fistulous openings, through which carious bone may be felt. Considering this a favourable case for excision of the head of the femur, I called a consultation of my colleagues at the Dispensary, when it was decided that the head of the bone was luxated backwards, and that the carious bone felt through the fistulous openings was a portion of the head of the femur. Excision of the head of the bone was approved of.

Operation, Nov. 12, 1849.—Having placed the boy on his left side upon a table, I commenced by making an elliptical incision over the great trochanter about six inches in length, and dissected the integuments well back from each side of it. I soon found that the head of the bone was still within the acetabulum and diseased; nevertheless, having thoroughly laid bare the bone, I sawed through it below the great trochanter, with a straight metacarpal saw, and then turned the head of the bone completely out of the socket. The ligamentum teres was destroyed. Although the capsular ligament was also destroyed, I experienced some difficulty in removing the head of the bone from the acetabulum, owing to the edges of the cotyloid cavity overlapping the head; and firmly grasping the neck of the femur, I next made an incision of three inches in length over the fistulous openings immediately below and behind the acetabulum, and removed a portion of dead bone, which proved to be a piece from the head of the thigh bone. Having made certain that no more necrosed bone remained, that the acetabulum was in a sound state, and no arteries required ligature, I brought the edges of the wound together by means of strips of adhesive plaister, and afterwards placed my patient in bed upon his back, and extended both legs, tying them together by means of handkerchiefs at the knees and ancles. This position was the most comfortable for him. The boy underwent the operation remarkably well and with great fortitude. No *anæsthetic* agent was used. To take half a grain of the hydrochlorate of morphia in a saline draught immediately; left him very comfortable.

10 p.m.—Found that he had lost a considerable quantity of blood, but by pressure by means of a linen pad and bandage, I completely suppressed it. To have fever diet.

13th.—Has passed a comfortable night; no further hæmorrhage from the wound; pulse 120; feverish and thirsty; to take a saline draught every four hours, and a pill containing a grain of opium at bed-time; an aperient draught to be given early in the morning.

14th.—Had a good night; the bowels have been well relieved; there is a sanguineous discharge from the wound; the limb feels easy.

15th.—Slept well during the night; bowels relieved; to continue the saline draughts and the opiate pill at bed-time.

16th.—Passed another good night; removed the dressings from the wound, a great portion of which is united by the adhesive inflammation.

17th and 18th.—Doing well, the febrile symptoms much less; wound discharges a thick, clear pus, and is rapidly filling with healthy granulations; a

linseed poultice to be applied; and to take two glasses of port wine daily.

December 1st.—Up to this date the boy has progressed most favourably, having had no drawback; the wound is nearly filled up with granulations, and the discharge is much less in quantity, so as only to require two poultices during the day; to continue the wine, and to have four ounces of meat daily—with milk night and morning. The hip is quite free from pain; the boy is in excellent spirits, and his appetite is very good; he is very desirous of sitting up.

7th.—Continues improving; very little discharge; to discontinue the poultices, and dress with simple cerate; he *sat up* to-day half an hour for the first time.

20th.—Going on remarkably well; sits up all day, and is able to walk about the infirmary with crutches; the wound is healed over, except a portion about the size of half-a-crown; very little discharge, and only requires dressing once a-day; appetite continues good; he now takes half a pint of ale daily, instead of the wine; has discontinued the opiate some time since; there is not the least pain about the hip, and can bear to press his foot upon the ground.

January 2, 1850.—Progressing most favourably, wound nearly well, the cicatrix is firm, and free from pain; there is great facility of motion at the hip-joint, as he can move the thigh most freely in all directions; when standing upright, the heel is exactly four inches and three quarters from the ground; he is much stouter than he was, and as he has expressed a wish to return home, he will be discharged from the infirmary in a few days. In contrasting his present condition with that prior to the operation, the advantages gained are the following, viz., a perfect freedom from exhausting discharge, hectic fever, and excruciating pain; and, instead of a fixed and crippled state of the limb, a straight leg and perfect pliability at the hip.

Description and Pathological Condition of the Head of the Thigh Bone removed.—The piece of bone excised measures exactly two inches and a quarter, from the upper extremity of the great trochanter to the edge of section below the neck of the bone; which, instead of forming an obtuse angle with its body, runs in a straight line from the trochanter to its head. The head of the bone has lost its globular shape; is much flattened and spread out; the whole of the cartilage is gone from the articulating surface, upon which are four carious cavities; there is also a carious cavity upon the upper and anterior surface of the trochanter; the neck of the bone is firm and in a healthy condition.

Remarks.—Excision of the head of the thigh bone has been performed but few times in this country; in fact, it is only within the last few years, that the operation has been revived by Professor Fergusson, of King's College, London. The attention of surgeons, however, has been recently forcibly directed to this subject by Mr. Henry Smith, of London, who has displayed considerable talent in an article upon it published in the *Lancet*, 1848. The Profession are certainly under great obligations to Mr. Smith, for the lucid and philosophical manner in which he has recalled their attention to this interesting surgical *procedure*, which, as he justly observes, is calculated to elevate the "science of surgery," The result of several cases recorded held out great encouragement to attempt the removal of the diseased bone by operation; and, indeed, as Mr. Smith remarks, and very truly, "one of the chief rules of surgery is this, that wherever any foreign substance is lodged or produced in any part of the body, causing irritation and disease, the same should be removed by the art of the surgeon if it can be got at." Acting upon this principle, I was induced to operate in the case I have detailed, the result of which is most satisfactory, and will prove very encouraging to future operators, as well as a powerful argument in favour of Mr. Smith's views, as regards the propriety of removing the head of the thigh bone when in a carious condition. indeed, it is the only chance the patient has, save and excepting the remote one of anchylosis, when the bone remains within the socket. Considerable discussion has taken place as to what part is first attacked in disease of the hip-joint. Sir B. Brodie thinks it commences first in the cartilages; Sir A. Cooper in the synovial membrane; but this is of little importance as to where the disease begins, inasmuch as the treatment would be precisely the same. The progress of the disease is as follows: we have first inflammation about the joint: an abscess forms, which after a time gives way; ulceration of the cartilages takes place; the capsular ligament is destroyed, together with the ligamentum teres; and lastly, the globular head of the femur becomes diseased; the action of the muscles produce luxation of the bone, and the displacement is generally upon the *dorsum ilii;* sinuses communicate with the diseased bone, through which an offensive discharge escapes, with occasionally pieces of carious bone; hectic fever sets in; there is great constitutional disturbance; the system gradually gives way, until death terminates the painful scene, and the surgeon has to regret that the resources of his art did not enable him to effect a cure. I am happy to bear testimony to the fact, that we are now in a position to hold out to the unfortunate sufferers a chance of their complete recovery from this truly formidable disease, by an operation which may be effected with expedition and perfect safety. It is advisable, that the disease should be so far advanced, that dislocation of the head of the femur should have taken place before any attempt is made to remove it; indeed, it is the excessive irritation caused by the presence of the head of the bone in its abnormal position, coupled with the weakened state of the patient by the exhausting discharge, that renders surgical interference justifiable; nevertheless, it does not follow that the operation would not be proper or advisable even when the bone is still within the acetabulum. The case I have just detailed bears me out in this assertion, as well as one operated upon by Professor Fergusson. (a) In both cases, an error in diagnosis was committed, but in neither instance had we to regret the operation, as the carious bone was effectually removed, and the acetabulum and pelvis free from disease. I do not, however, advise the operation, unless we are tolerably certain the bone is dislocated, or that it is still *in situ* with the great *trochanter and neck* in a carious state *only*. Then, under such circumstances, we should be justified in cutting down upon and removing the great trochanter and neck of the femur. The shortening of the limb, where the head of the bone is still within the socket, is accounted for by the neck of the femur becoming softened from disease, the great trochanter is forced upwards, and the neck, instead of forming an obtuse angle, is in a straight line with the great trochanter. This will cause a shortening of the limb of several inches, the knee will project over the thigh of the sound limb, and the great trochanter be carried upwards and outwards firmly against the integuments, as in the case just given. My case is both interesting and instructive. The boy, after years of suffering in a crippled and pitiable condition, is now in perfect health, and his deformity nearly removed; and all this was effected in the short space of six weeks, the large cavity filled up by healthy granulations, and nearly skinned over. Surely this is evidence enough—if, indeed, any were wanting—to show us what Nature is capable of effecting where the cause of irritation is removed. Years had been lost in excruciating pain, accompanied by exhausting discharge, in endeavours to throw off the obnoxious substance, when, thanks to Mr. Henry Smith for his practical suggestions, I put in force the operation, and, after a few minutes, cleared away the carious bone, when Nature, as if grateful for my assistance, immediately sets about repairing the mutilated part and completes the cure. Since operating upon the boy, the details of a most interesting case of resection of the head of the femur has been published by my friend Mr. Cotton, of Lynn. (b) Great credit is due to that talented surgeon for the clear and precise way in which he has given the particulars of his case to the Medical Profession, and the candour with which he has described the progress of it. The patient, a girl, was in a most pitiable state when admitted into the hospital, and was, as Mr. Henry Smith has so graphically described, "a pitiable object, harassed by pain and worn down by slow and wasting hectic;" indeed, from the description given of the girl, none but such an enterprising surgeon as Mr Cotton would have had the courage to have removed the head of the thigh bone from its unnatural position, in so apparently hopeless a case. The case is unique in its way; and from the severity of the symptoms, caused by the irritation of the carious head of the femur in its abnormal position, makes it a fair test as regards the propriety of the operation in these diseases. I am fully acquainted with Professor Syme's objections to this operation. With due deference, however, to the learned Professor, I think that his conclusions are rather premature. The case above narrated, together with those of Professor Fergusson, will go far to convince the Profession of the safety of the operation, as well as to set aside the erroneous views propagated by Professor Syme, in reference to a proceeding with which he has himself had no practical acquaintance.

Since the last report, I have been favoured with a visit from Mr. Henry Smith, from London, who has carefully inspected the case, and it is his opinion, taking into consideration the shortness of the time since which the operation was performed, and the deplorable condition which the patient was previously in, that it is altogether the most satisfactory and interesting of those hitherto recorded.

(a) *Lancet*, April, 1849.
(b) *Provincial Medical Journal*, P. 683 1849.

A DESCRIPTION OF THE APPARATUS FOR EMPLOYING THE MECHANICAL LEECHES.

By J. J. TWEED, Esq., Surgeon,

Every medical man, in the course of practice, must have experienced the disadvantages, as well as the advantages, of applying the living leech. Not to mention, in the first place, the trouble and difficulty sometimes experienced in making them adhere to the surface, the uncertainty attending the quantity of blood which may flow from the orifice is also a great objection; in one case, perhaps, being exceedingly deficient, amounting to a mere nothing; in another, as is frequently the case in children, being very profuse and indefinite, so much so, as to turn the scale unfavourably for our little patient. We cannot possibly measure the quantity of blood lost, nor order a definite quantity to be drawn, as by bleeding and cupping, but prescribe so many leeches to be applied, and ten chances to one, we are not disappointed in the result. Instances must occur to every one's mind, in which important time has been lost, in the early stages of bronchitis or pneumonia in children, through the leeches ordered not having "taken," or the flow of blood being much less than anticipated; on the other hand, in the more advanced stages, when the loss of blood is ill borne, a much larger amount has escaped than was intended, great prostration induced, and in consequence, a fatal termination to the case. Even in adults, the hæmorrhage from a leech bite is often exceedingly troublesome, and, although in them, cupping is generally prescribed, yet, there are some parts of the body upon which it is impossible to apply a glass of that site, especially in emaciated subjects: moreover, the services of an experienced cupper are not always at hand, and, if they were, the poorer class of patients cannot afford to pay the fee. In the country, the surgeons are compelled to take that department of surgical practice into their own hands, and yet how few perform it with any thing like dexterity or success. To these gentlemen, I cannot conceive but that the mechanical leeches will prove a great desideratum. A village practitioner is frequently obliged to send three or four miles or more, to the nearest country town, in order to obtain a supply of the living leeches, and that, perhaps, a case of great emergency.

I propose now, to explain the manner of employing these mechanical leeches, and hope, with the assistance of the accompanying woodcuts, to render it quite intelligible. In the first place, particular care should be taken that the tubes and scarificator are in good order, act easily, and the piston well greased with the lard contained in the box for that purpose.

The ordinary box contains twelve glass tubes

or leeches, a scarificator, style, and other minor apparatus.

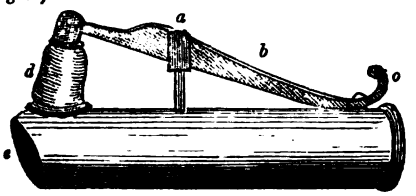
Each tube or leech is about two inches and a half long, with a diameter about that of a sixpence, two-thirds, or nearly so, of which are covered with leather; one extremity of the tube is open, the other closed, by a circular plate of bone or wood, which is pierced by a small aperture in the centre; within the tube, and attached to the under surface of this plate, by means of Indian-rubber, is a piston, closely adapted to the tube.

The Scarificator, (Fig. 1.) consists of a glass tube three inches in length, with a diameter rather smaller than that of the other tubes; it is entirely covered with leather, open at one extremity, and closed with the piston and circular plate at the other; to its upper part is affixed a stem, (*a*,) two-thirds of an inch high, upon which moves a steel arm or key, (*b*.), one end of which is free, and terminates in a rounded knot, (*o*;) the other having attached to it a piece of caoutchouc, (*d*,) which constitutes a spring, and beneath which is concealed a three-edged lancet, or scarificator, (*e*). Besides this, there is a small hook, near the closed end of which, when the extremity (*o*) is depressed, receives it.—*Vide* Fig. 2.

The style merely consists of a rounded piece of steel, three inches long, fixed in a handle, for the convenience of using pressure.

Directions for Using.—Any number of tubes may be applied at the same time, according to the quantity of blood we wish drawn.

The part to be operated on must first be wetted with tepid water; we then take the scarificator, and having removed the case, which protects the lancet, we depress the free extremity of the key, till it reaches the hook, underneath which it is carried, and there held; this of course elevates the opposite extremity, and it is then said to be charged. (See Fig. 2.)



We then introduce the style into the small aperture of the circular piece of wood, and using firm but steady pressure, we push down the piston about three-fourths of the tube, and in this way apply the open end to the part to be operated on; holding it in this position firmly, with the index finger and thumb of the left hand we remove the style; the piston is drawn back by the elasticity of the caoutchouc spring, and a nodule of flesh is thus drawn into the tube; the key is then to be released from the lock, or unsprung, the lancet descends simultaneously, and, without the slightest pain, makes the puncture.

The scarificator is then removed by depressing the piston and one of the tubes applied in the same manner. In this way we can apply as many as we wish, and the same tube several times over the same puncture, if necessary to draw more blood.

Particular care should be taken—

1st. To have the piston well greased.

2nd. Not to apply the tubes upon the skin before having first pushed down (as is shown above) the piston, until it may be seen below the leather which covers the tube; as the leather covers the whole of the tube of the scarificator, the piston in it should be pushed down rather more than two-thirds. If the parts to which the tubes are to be applied are soft and flabby, the skin should be put upon the stretch with the thumb and finger of the left hand, as the tube then adheres much better; if the parts are covered with hairs these must be cut with scissors.

Cleansing the Tubes.—To do this, it is necessary to withdaaw the circular disc and piston, wash the tube in water with the little brush provided for that purpose, and afterwards dry it. The piston must not be wetted, but greased every time it is used; it is also necessary, before using it, to work the piston twice or three times, so that it may act easily upon the interior of the tube.

HOSPITAL REPORTS.

LEEDS GENERAL INFIRMARY.

OPERATION FOR CLEFT PALATE.

By SAMUEL SMITH, Esq., Senior Surgeon.

[Reported by Mr. THOMAS SCATTERGOOD, Assistant Apothecary.]

Henry Wilkinson, aged 18, a delicate-looking lad, with face deeply pitted by the small-pox, was admitted Nov. 21st, 1849. He was the subject of cleft-palate, the fissure extending from the apex of the uvula to about half an inch from the margin of the hard palate, the latter being quite perfect. The inconveniences he experienced from the malformation were, that he spoke with a strong nasal tone and in a very indistinct manner; and that whenever he attempted to swallow liquids, a portion of the liquid regurgitated through the nostrils.

Nov. 22, 1 p.m.—Mr. Smith operated. The first step in the operation was to divide the levator palati muscle on each side, as advised by Mr. Fergusson. This was done with great ease. When the velum was touched, the muscle was thrown into strong action, and could be felt by the finger as a tense cord. The edges of the cleft were then pared, by transfixing each flap near the upper extremity of the cleft, and carrying the knife down to the apex of the uvula so as to separate a narrow strip of mucous membrane on each side; then removing both these portions, hitherto left connected together and to the velum, by dividing their common attachment, the patient was now sent away to wash his mouth out well with cold water, while another operation was being performed, Mr. Smith not wishing to attempt the union of the cut surfaces until the bleeding, which was not great, should have ceased. After a few minutes the patient returned, and all oozing having ceased, two sutures were introduced, one about a quarter of an inch from the apex of the uvula, and the other midway between the first and the upper extremity of the cleft. Small curved needles, threaded with a long silk ligature, were employed, and they were introduced by means of a pair of dressing forceps, having a small flat piece of cork, one-eighth of an inch thick, tied upon the inner roughened surface of each blade. The operator, standing in front, passed the needles from without to within on the left side, and from within to without on the right side. Holding in his left hand a slip of cane about five inches long, armed at its extremity with a small cork; by gentle pressure with this instrument he prevented dragging of the flaps, while the needles were being introduced, and received upon the cork the point of each needle after it had passed through the soft parts. The sutures were then tied with the ordinary reef-knot, and the patient was sent to bed, with strict injunctions to take nothing to eat or drink until the next morning, and not to speak to any one except the house surgeon or nurse. During the whole of the operation the patient behaved with great firmness and self-control; but considerable embarrassment was caused by the occurrence of vomiting, which took place four times during the operation.

23rd.—The patient had strictly obeyed the directions which had been given him as to abstinence from food and from conversation. He was now allowed (about ten, a.m.), to take a little boiled milk with arrow-root, and it was found that none of it passed into the nose. The apex of the right portion of the uvula was observed to be discoloured, as though likely to slough.

25th.—One of the sutures was removed on the 24th, and the other this day. The edges of the cleft were found to be united, as far down as nearly to the second suture; a portion of the apex of the uvula on the right side was sloughing.

Dec. 4th.—The case had proceeded quite favourably; the union of the upper three-fourths of the cleft was now quite firm, and at the lower part of the uvula there were two clean granulating surfaces. A suture was introduced in the same manner as previously, to keep these surfaces in apposition.

9th.—On removing the suture, the parts were found to be quite adherent.

14th.—There was no fissure remaining. The uvula was rather shortened and thickened at its apex, but its movements were quite perfect. Ever since the operation, the patient had been able to swallow liquids without any portion of them regurgitating, as they previously did, through the nose. His speech was somewhat improved, and the improvement very apparent, indeed when he was induced to make the attempt to speak distinctly. It was evident that the muscles required tutoring in order to articulation being rendered completely distinct.

The principal peculiarity in this operation was the employment of a pair of dressing forceps, to the inside of the blades of which (as above described) portions of cork had been fastened, for the purpose of holding the needles. This instrument was found to have a great advantage over the *porte-aiguille*, inasmuch as the latter can only hold the needle in one direction; whereas, by the armed forceps, the needle may be securely held at any angle, and pointed in any direction whatever. The cork attached to a handle, which was held in the left hand of the operator, by means of which he was enabled to make, as it were, counter-pressure, and to receive the points of the needles, was also found very useful; the cork held the point of one needle so firmly, that the latter was withdrawn, by its means, fairly out of the mouth.

The firmness of the patient, in steadily abstaining from any but liquid food (boiled milk and arrow-root) for many days after the operation, no doubt contributed greatly to its success.

PROGRESS OF MEDICAL SCIENCE.

SCOTLAND.

[Edinburgh Correspondence.]

COD LIVER OIL IN PHTHISIS.

The curability of Phthisis, and the nature of the beneficial influence of cod-liver oil over that and other forms of tubercular diseases, are subjects of surpassing interest, which cannot obtain too much attention from the Profession. A paper on these points, read by Dr. Bennett at the first January meeting of our Medico-Chirurgical Society, has been the topic of much discourse in our Medical circles. Dr. Bennett has before called attention repeatedly to the curability of phthisis, and he was the first to place before the Profession in this country evidence of the great utility of cod-liver oil in tubercular diseases. The evidence he brings forward of the curability of phthisis deserves to be well-considered, and the theory which he supports as to the operation of cod-liver oil, though still incomplete, is of so probable a character as to promise to lead ultimately to the truth.

The term curability, as applied to a disease, implies that the cure takes place in consequence of the use of definite curative agents, or that the cure may be effected, or at least promoted, by the exercise of the art of medicine. Here, then, there is a difference of opinion. It is well-known to the Medical Profession, that Laennec taught that phthisis, though not curable by art, is sometimes cured by Nature—or that it sometimes happens that tubercular cavities became closed by a calcareous deposit, and that, if there be enough of healthy lung left to carry on the function of respiration, the patient returns to health. Accordingly, there are some here who regard the evidence of the curability of phthisis, brought forward by Dr. Bennett, and

the pathologists who agree with him in opinion, as rather confirming what Laennec taught, namely, that there is at times a spontaneous cure of phthisis, than as proving that it ever can be cured by means put in force by art. But, in answer to this view, we are reminded by others, that it is hardly less true in medicine proper than in surgery that Nature cures, while remedies but serve to disembarrass the healing tendencies of whatever may at the time interfere with their otherwise spontaneous efforts. That thus, therefore, it may be there is as much natural tendency to the cure of tubercles as to the healing of wounds, but that this tendency is too often overpowered by the derangement of health, perpetuated by the unchecked successive deposition of new tubercular matter. Now, it can hardly be doubted that the infliction of a number of wounds in a long-continued succession, each in itself of no dangerous character, would so interfere with the healing process, that death would generally be the result. Let it be supposed, that the same circumstances which first gave rise to the deposition of one or two tubercles continue to operate unchecked for a lengthened period, and the usual fatality of phthisis is at once accounted for, even on the supposition that there is an inherent power in the system to arrest or cure a moderate deposition of tubercle.

Dr. Bennett rests much of his argument on the large proportion of cicatrised tubercular cavities found in those who, at a subsequent period, die of other diseases. He affirms that one-fourth of all the bodies examined after forty years of age in the pathological theatre of Edinburgh Infirmary during a period of several years, where death had occurred from other diseases, showed unequivocal marks of previously cicatrised tubercles in the lungs. Thus, if this be true, or be even a distant approach to the truth, it is certain that the system, after the formation of tubercles, often comes spontaneously into that state which prevents the further deposit of tuberculous matter, and which permits the natural healing tendencies to close already existing cavities. There is, therefore, at least an encouragement held out to consider attentively whether there be not any means within the power of art by which, in cases of partial tuberculous deposit, the system may be brought into the state, the spontaneous occurrence of which, as it appears, so often puts an end to this malady.

Under this view of the subject, those who feel unconvinced of the truth of the main features of Dr. Bennett's theory, as to the operation of cod-liver oil, after the partial deposit of tubercle, as well as those who reject the evidence of its utility in phthisis, must feel themselves called on to investigate the whole subject, with the expectation of discovering how the system is to be brought into the state which repels the further invasion of tubercular disease. In all fairness, Dr. Bennett's views deserve a full discussion before any other channel of investigation be resorted to. In 1841, he, on his return from a prolonged residence abroad, published a monograph on cod-liver oil, drawing attention to the beneficial effects he had witnessed from it in Germany, and detailing cases in which it had been successful in his own hands. He was twitted by our highest critical authorities at that time, with making much ado about nothing, and told that what he might have to say might have more appropriately graced the pages of one of our medical periodicals, and that the remedy, the merits of which he advocated, would, like so many of its predecessors, "fret its brief hour upon the stage." The Profession, however, has since almost universally stamped this remedy with their approbation, and in truth its effects are really surprising. The diseases in which its effects are so remarkably beneficial, may be described as diseases marked by defective nutrition, such as so signally characterises tubercular maladies.

Dr. Bennett is not inclined to insist on any special influence of cod liver oil. He thinks the good effect produced by it to be due to its being an animal oil, so as thereby to supply the place of the normal fatty matter which is provided from other sources in the healthy state, for the formation of perfect chyle. Thus, if the tubercular diathesis be kept up by such a defect in the assimilative power as prevents a sufficiency of fatty matter from being formed in the normal manner, from the sugar and starch contained in the aliment, it can be understood why the direct ingestion of an animal oil should be useful towards counteracting that diathesis. The points to be inquired into then, are how far there is probable evidence, in the first place, that the tendency to the deposit of tubercle is connected with the failure of the digestive organs to manufacture fat out of the usual aliments, which give origin to it, namely, starch and sugar; and, secondly, how far the ingestion of cod liver oil or of any other animal oil can supply the place of the fat or oil which normally should be produced in the course of the process of digestion. The first plainly involves the question, whether the wasting of the body be, in its commencement, antecedent to, or consequent on, the deposition of tubercle. There is no want of probability on the side of the former alternative; but, if we would be sure of seizing the truth, no definitive opinion should be pronounced without further inquiry and observation. Next, as to the necessity for oily matter towards the formation of chyle. The most exact recent accounts of the chyle afford such a representation as the following: — The chyle in the different lacteals contains fat in minimum quantity, albumen in minimum quantity, and is almost destitute of fibrine. In the different lacteals it contains fat in medium quantity, albumen in maximum quantity, fibrine in medium quantity; in the thoracic duct it contains fat in minimum quantity, albumen in medium quantity; fibrine in maximum quantity. Whence, then, is this fat derived, and what becomes of it as it disappears? The first question will suffice for the present. The only conceivable sources of this fat are, — secretion from the blood either into the small intestines, or into the afferent lacteals; 2, its direct supply from the aliment taken in; or the conversion of certain aliments into fat by an assimilation already completed by the time they reach the first portion of the lacteal system. Of these suppositions the last is the most certain, there being undoubted chemical evidence that the starch and sugar of the food are changed to oil, and, as it would seem, by an assimilation which is completed before the lacteal absorption commences. Of the other two suppositions, that which points to the blood as the source of the fatty globules of the chyle seems untenable, while the other, or that which regards the fat of the chyle as derived directly from the aliment, requires some consideration. In the mean time, then, the case stands thus:—It is not an assumption that the starch and sugar of the food are converted into oil; but it is an assumption that this source of oil fails in those cases in which cod-liver oil acts beneficially, —it is perhaps undeniable, that there is an imperfection of nutrition in such cases,—but it is an assumption that that imperfection consists in the inability of the digestive system to convert starch and sugar into oil. This, then, is one of the points most deserving of investigation, or further evidence must be sought to connect the tubercular diathesis with the defect in the system to convert starch and sugar into oil.

But, if this point be taken for granted, in the mean time, can it be admitted further as a probability, that the ingestion of an animal oil can supply the place of an oil usually produced by the transmutation of starch and sugar; and, if so, that cod liver oil should be particularly adapted to that purpose. Here a whole phalanx of questions immediately starts up. Can oil, received into the stomach, act the part of the normal oily fluids of the living body? Judging on general grounds, drawn from chemical physiology, we should here answer in the negative. In the human body there are various oily bodies more or less different from the oils or fats found in the bodies of other animals. True, it cannot be said that we know what is the precise chemical constitution of the fatty matter of the human chyle, but, consistently with the known general principles of organic chemistry, it is hardly conceivable that cod liver oil, or any other fish oil, without a distinct process of assimilation, should at once supply the place of that oil which is usually derived by assimilation from starch and sugar. Here, unquestionably, a difficulty arises. The assimilation of oils, under ordinary circumstances, is confessedly difficult; and this difficulty, probably, depends on the oils and fats taken into the stomach as food, being so very different from the normal oily matter of the human chyle, that the conversion of the one kind of oil into the other is less easy than that of transforming starch and sugar into the same fatty or oily substance. On this subject, Mulder says: "When fats in the animal body are produced from those that exist in the food, there must happen, in every case, a conversion of neutral fats into fatty acids, and, again, of the latter into neutral fats. But there must take place, besides, a change in the relative proportions of margarin and elaïn; in the human body, for instance, the fats of which contain margarin and elain in a definite proportion, if the requisite proportion of these is not supplied to it in the food. It is evident, for example, that olive oil, which contains much elaïn, and but little margarin, cannot be converted into human fat, without previously undergoing a change. Further, there must take place a conversion of one fatty substance into another,—for instance, of margarin into stearin, or *vice versâ*." On the other hand, though the whole subject requires an exact inquiry, there is no difficulty in admitting the probability of certain fish oils bearing a close analogy, in composition, to the liquid fat of the human chyle,—and thus, that these may be, under certain circumstances, not merely convertible, like other kinds of non-azotised aliment, but much more easily—that is, with less effort of the digestive apparatus—than ordinary fats into the necessary kind of oily matter. While, then, the subject is one of the highest interest, every one here, who takes it up, feels how much still remains to be done before a complete theory can be obtained. As Dr. Bennett, doubtless, will soon publish his Paper, no attempt has been made to state its peculiarities. Neither have we entered on what he considers a most important part of the subject, namely, the deductions which he draws, as bearing on this subject, from Ascherson's experiment, in which, when oil and albumen are brought in contact, a membrane forms, enclosing a particle of oil. Dr. Bennett's Paper on this subject is already published, as read before the Royal Society of Edinburgh in 1847.

IRELAND.

[Dublin Correspondence.]

TYPHUS, TYPHOID, AND RELAPSING FEVER.

The views lately put forward by Dr. Jenner, in London, have created no little sensation among the thinking portion of the Profession in Ireland, a key having been at length furnished to the many multiplied shapes in which this peculiarly "indigenous" disease—to use Chomel's phrase—has hitherto appeared. A lengthened and elaborate Report on the late epidemic fever, got together by the unwearied assiduity of Mr. Wilde, furnishes a wide field for studying the subject, and corroborates, in a very singular manner, the very novel and interesting positions so ably advocated by Jenner. The facts have been furnished by the chief men in all the different counties, and coming to us without any particular doctrine to uphold, are peculiarly valuable. In some few places a little obscurity exists, but considering the tens of thousands of cases on which the Report is founded, the regularity with which the three forms of fever of Jenner are fouud is quite remarkable.

The Report begins with the province of Munster. Here we have the chief disease—relapsing fever—going into typhoid, and among the higher classes typhus.

In Cork, "relapse fever," no eruption; doubts of contagion expressed; in 43 only, out of 747, spots; the re-lapse cases going into typhoid—typhus, upper classes.

In Tipperary two epidemics seem a little confounded; one, in 1846, with mulberry eruption (typhus?) the other the peculiar epidemic of 1847 we are speaking of, and which seems all through this large province, simple "relapse fever." The cases rose from the usual average in hospital, 75, to 518, and were marked by this peculiar tendency to relapse; at first not contagious and without eruption, the disease went off after a few days; this

fatal relapse ensuing, and typhoid, with ulceration of the bowels, the result.

In Clare, among hundreds of cases, the same tale—"relapse fever," spots not observed; relapse frequent, with ulceration. Among the higher classes, on the contrary, typhus, with mulberry eruption; no relapse. Among the poor, Dr. Cullinan says, the former was known as the "short sickness," not very fatal; while, among the latter, 25 per cent. died, and was universally dreaded.

Limerick.—True "relapse fever;" doubts expressed, both here and in Clare, about contagion, though the popular prejudice ran the other way. "Petechiæ in the relapse cases, where they did not occur in the primary fever;" upper classes, typhus without relapse.

Kerry.—"Relapse fever," going into typhoid with "aphthous" ulceration of the bowels; the disease itself not particularly dangerous, but made so by various causes. The frightful account, indeed, given by Dr. Crumpe, is like a leaf taken out of Ainsworth's "History of the Plague." No one can read it, and think such an epidemic again possible; and the Government higgling about Medical Charities, without feeling a shudder. Waterford.—The three varieties distinctly marked. Typhoid with rose-coloured patches; 490 together in hospital, (summer, 1847;) distinctly contagious;—then, in autumn, dysentery set in with "relapse fever" and typhus. In a large amount of cases relapse being the most prominent feature. No eruption till the second attack, when it was mulberry. (Typhus?)

In Schull and Skibbereen the poor had "famine fever." The persons better off "relapse fever" and typhoid; the upper classes typhus and "gastro-bilious fever." The "famine fever" was very peculiar, characterised by great prostration, thirst; a dry chaffy hot feel of the skin; weak, feeble pulse; intellect clear. No period, stage, or crisis; terminating in death from inanition alone. The person exhaled a peculiar septic odour, and when in contact with better fed individuals, imparted fevers of different types. Forty-eight medical men died in the province.

Province of Ulster.—The contrast between this province and the preceding one is not a little remarkable. In the preceding, contagion was doubted; in this province, on the contrary, at Antrim, Derry, Donegal, Tyrone, Cavan, Armagh, and Down, the wealthier parts of Ireland, the marks of contagion and of altogether a different type of fever were unequivocal. At Belfast, as one should expect, the three varieties already spoken of were remarked:—1st. "Relapsing synochs," so described by Dr. Malcolm. 2nd. Simple continued, with typhoid symptoms; and 3rd. Typhus cases spotted generally. In a population of 110,000, one-seventh, or 16,000 got fever! At Omagh, 814; in Cavan, 915. Dr. Black describes the chief peculiarity the tendency to relapse. In Derry, among the upper classes, the brain was chiefly affected. In the lower, the fever differed from previous epidemics in its tendency to relapse. In Donegal nearly the same tale—contagion everywhere; the disease differing from other epidemics. In "the early appearance of typhoid symptoms the frequency of purple spots and relapses; in some cases three and four times." In Tyrone and Cavan the same. In Armagh, evidences of contagion, as elsewhere. In the better classes typhus, without ulceration. Among the poor, typhoid, with diarrhœa and relapse; purple spots not common. The rate of mortality higher among the upper classes than among the poor; 40 per cent. among the former, 4 among the latter. In Roscommon, the cases with "well-marked crisis," on the fifth or seventh day, *without a single exception*, relapsed; they were generally non-petechial at first. In Castlebar, a repetition of the dreadful scenes of Kerry occurred; the most frightful typhus, from the huddling together of the sick; the mortality 40 per cent.; while outside, in the country, the fever was the mild relapse kind,—relapse from the typhus scarcely occurred at all, (never, perhaps.) In the Ballinrobe workhouse, the ravages of typhus were also terrific. In addition to a mass of wretched paupers, huddled together in the disease, the Physician, Master, Matron, Chaplain, and Clerk, were all lying, at the same time, in bad typhus. Among the better classes, six or seven out of every ten died. In some cases, they were covered from head to foot with spots as large as a fourpenny piece, of a dark mulberry colour, while in others they were of a "bright vermillion hue." No mistaking these, one should think. In one of the islands off the coast, the fever was of the simplest kind; in 86 cases, however, there were 79 relapses. In Down, the evidence of contagion, positive among the poor, not so clear in the upper ranks of the community; the disease marked typhoid among the former, with diarrhœa and dysentery. In all this province, relapse was present, but not so common, perhaps, as in Munster. Spots rarely occurred, except they made their appearance in the primary attack. The mortality was far greater among the respectable classes in Cavan, amounting to 66 per cent.; while, in the Fever Hospital, out of 1236 cases, but 48 died,—4½ per cent. In Donegal, the average mortality, 8½; in Tyrone, 11; in the Belfast Hospital, 12½. In Derry, the cases seemed a little puzzling; Dr. Jenner's distinction not at that time known. "The cases following relapse," says Dr. Rogan, "were of a peculiar character, differing from true typhus." Of course they were,—the relapse fever, and its succeeding typhoid, differing as much, perhaps, as scarlatina and measles.

Province of Connaught.—In this part of the kingdom, we have the same evidences of the contagious character of the disease, after it passed the ordinary relapse fever. At Sligo, purple spots were frequent, (typhoid). In Leitrim, the same. In Galway, great tendency to relapse; purple spots in "ten out of every twelve cases." All through this province, as in the others, diarrhœa and dysentery attended the relapse cases, pointing to ulceration, (typhoid?)

GALWAY COLLEGE.

Matters here are beginning to wear a more promising aspect. The Matriculation Examination terminated on Thursday week, when 39 candidates were admitted, which, with those already admitted, make 69. The Scholarship Examination, a few days after, was not less encouraging.

IRISH MEDICAL CHARITIES.

In Cork, a move has been made to get the Medical Charities under the Poor-law. A meeting was called, but no one attended. There were no knighthoods to be distributed. In Dublin, the same nearly has occurred,—a Remonstrance having been issued by the Board of Guardians against throwing these institutions on them. The intention of Government, it was rumoured, was to withdraw the grants, at the rate of 10 per cent. per annum. Rather shabby, by the way, of the Government, if true.

In Kilkenny, celebrated for its feline achievements, the Guardians have been discussing the propriety of building a Cholera Hospital, which looks, it must be confessed, very like the old piece of *gaucherie*,—shutting the stable when the horse is stolen.

SELECTIONS FROM FOREIGN JOURNALS.

THE MEDICAL CONSTITUTION OF THE YEAR 1849 IN PARIS.

The *Gazette Médicale*, of the 29th of December, attempts a retrospective summary of the medical constitution of the year 1849. This retrospect is liable to the objection made to all similar attempts, viz., that one man's experience, however accurate we may admit it to be, can never represent fairly the actual occurrences. A true account of the medical history of a year can only be safely founded on a basis of accurate observations, sufficiently numerous as to represent in some measure the total amount of sickness. Even the histories of Sydenham have, on this account, met with few imitators, as most men have been conscious that they could not fairly generalise from their comparatively limited field of view. The statement made in the *Gazette Médicale* is, however, possessed of considerable interest, and we, therefore, with the reservation above made, give an abstract of it.

In July, August, and September, 1848, the observation was made, that many diseases seemed to be acquiring unusual features; more diarrhœa than usual occurred, and, especially in children, was complicated with cerebral symptoms; anginas passed often into bad diphtheritis or gangrene; scarlatina, if accompanying such anginas, followed an irregular course; occasionally, the exanthemata seemed to terminate in a kind of remittent fever. A singular species of fever was also observed at Paris, very different from ordinary typhoid, but presenting, especially at its close, the appearance of one of the forms of epidemic cholera. There was in this fever little or no diarrhœa, but alternations of heat and cold; a small, soft, and irregular pulse; no meteorism, no delirium; an extreme feebleness. After some days, when nothing indicated danger, the pulse suddenly became threadlike; the eyes became sunken and surrounded with a dark circle; and the patient died without agony. (a) In October, 1848, gastro-intestinal affections became more common, and were accompanied by symptoms whose connexion with cholera could not be doubted; such as abdominal pains, bilious vomitings, meteorism, small and slow pulse, lowering of temperature, achings in the thighs and legs. At the end of November, 1848, a case of cholera occurred at Calais. In January, 1849, the usual affections still continued to present an unusual character. At the onset of fevers there was often an extreme adynamia, which disappeared in a few days. Many symptoms seemed to foretell the advent of cholera. The first case of cholera occurred on the 10th or 11th of March at St. Denis. In 1832 the first case occurred in Paris on the 26th of March. During the prevalence of cholera at Paris, there were observed a number of intercurrent abdominal affections, more or less impressed, so to speak, with the seal of cholera. These diseases were especially non-febrile serous diarrhœas, non-febrile and febrile dysentery, gastro-enteritis, with little diarrhœa, neuralgic colics, &c. These affections have even now not disappeared.—(*Gazette Méd.*, Dec. 29.)

SOFTENING OF THE POSTERIOR COLUMNS OF THE CHORD; CONSERVATION OF SENSIBILITY AND REFLEX MOVEMENTS—ABOLITION OF VOLUNTARY MOTION.

A remarkable case in a child has lately been read by M. Brown-Seguard, before the Société de Biologie. In this case life was ultimately destroyed by the supervention of acute tubercular cerebral meningitis on very old spinal meningitis, with softening of the posterior columns of the cord in the cervical region. There had been perfect paralysis of the muscles of all the extremities; but, from the retention of the reflex movements, the muscles were in excellent condition. The sensibility of the skin was preserved *in toto*. The patient had attained, in spite of the disease, a stature nearly as great as in healthy individuals of the same age.—(*Gazette Méd.*, 29th Dec.)

ON THE EFFECT OF PNEUMO-THORAX ON THE SOUNDS OF THE HEART.

The variations in the extent to which the sounds of the heart are transmitted are well known. The transmission is impeded by emphysema, increased by consolidation of the lung, and occasionally, as stated lately by M. Racle, by pleural exudation. M. Barth has lately published a curious instance of some rare auscultatory phenomena observed in a case of perforation of the pleura. The patient, a man aged twenty-two, when first seen, was labouring under pleurisy, with effusion, as evidenced by general symptoms, by dulness on percussion at the left base, absence of respiration and ægophony at the angle of the scapula. Subsequently there were signs of softening, no doubt tuberculous, of the left lung, and, finally, perforation of the pleura and pneumo-thorax. This announced itself by the usual symptoms of metallic tinkling, of tympanitic note on percussion, and ringing voice and cough. But, in addition, the sounds of the heart had, on the left side, a distinctly metallic character, which, although not uncommon in some cardiac affections, has not, M. Barth believes, been noted in pneumo-thorax. M. Barth entertains no doubt that the air in the pleura, maintained at a certain tension, produced this metallic note, and suggests the possibility of, in some cases, the same note being given by the apex of the heart striking near a stomach distended

(a) No account is given of the *post-mortem* appearances, nor is any eruption mentioned.

with gas. In this case, also, there was a friction sound in the cardiac region synchronous with the heart's movements, which M. Barth believes to have been entirely pleural, and produced simply by the pericardium rubbing against the inflamed pleura. A similar case is recorded by Dr. Stillé, of Philadelphia. (*L'Union Méd.*, Jan. 1.)

THE INNERVATION OF THE LYMPHATICS.

The dependence of the movements of the frog's lymphatic hearts on the spinal cord was discovered by Valentin; but, from the experiments of the author, it would appear that his conclusion is susceptible of amplification and extension.

The fibres which pass from the spinal cord to the anterior lymph-heart lie in the second spinal nerve; in a branch which passes backwards from this nerve opposite the anterior edge of the transverse process of the third vertebra.

Destruction of the cord, or section of the second nerve previous to this branch, or section of this branch itself, alike result in an instantaneous stillness of the anterior lymph-heart. In from fifteen to ninety seconds the pause is interrupted by the resumption of movement in a few muscular fasciculi. These movements extend to other fasciculi until, finally, a complete contraction is reproduced. Hereafter this regular contraction is mixed with incomplete ones, and the heart often pulsates irregularly, but strongly, for a quarter of an hour.

The application of magneto-electric irritation produces the same instantaneous stillness: this lasts as long as the cause; and, on its removal, the contractions are quickly resumed. When applied to the cut surface of this part of the spinal cord itself, the same phenomena result.

The fibres corresponding to the hinder lymph-heart lie in the tenth spinal nerve,—rarely in the ninth. Experiments similar to those above gave similar results, except that the stillness produced by section, or galvanism, was less complete. This difference is explained by the author as probably due to the great difficulty of isolating the particular fibres. Rarely they seemed to come off from the nerve so close to its emergence as to elude section altogether.

The author concludes that, in the frog, the second and tenth spinal nerves fulfil the office of the vagus to these lymph-hearts, as those of the cerebral vagus do to the blood-heart.

He adds, that a complete control would best be proved by irritation of the corresponding nerves, simultaneously with local impressions on the heart, producing pulsation. But its small size and little irritability render this impracticable.

Nevertheless, the appearances above,—to wit, the almost immediate resumption of movement after section or irritation of the nerve,—are altogether analogous to the phenomena of the vagus and blood-heart, and in no way referrible to a tetanus produced by an irritation of the nerves.—(*C. Eckhard, of Marburg, in the "Zeitschrift für Rationelle Medizin."* 1849. Band viii. Heft. 1 and 2. Pp. 211—215).

ANALYSIS OF BLOOD.

In the *Révue Médicale*, for September, is a paper by M. Abeille, on the composition of the blood in various diseases. The writer has limited himself to the sole task of following exactly the ground occupied by the researches of M.M. Andral and Gavarret. He has analysed the blood according to the method recommended by these pathologists, and as far as possible selected the same diseases as were chosen by them. In inflammations he finds, as Andral and Gavarret and many others have since found, the fibrine augmented; in typhoid fever and in variola, diminished, the diminution being most marked in the adynamic forms of both these maladies; in intermittent fevers, the proportion of fibrine was normal; any augmentation, M. Abeille believes to be dependent on a latent inflammation. In nine cases of "cerebro-spinal meningitis" the fibrine was found invariably increased from 4·3 even to 10·1 parts per 1000. These observations agree with three analyses of M. Levy, who found the fibrine to range from 4·3 to 5·6 per 1000, and imply a great distinction between typhus and typhoid fever and "cerebro-spinal meningitis." In albuminuria, the albumen of the blood was found below the standard, as also testified by Andral and Gavarret, and all other observers.

OPERATION OF GASTRO-STOME.

In a case of malignant disease of the œsophagus, in which the patient was dying of starvation, M. Sédillot recently performed the bold operation of making an opening directly into the stomach for the purpose of introducing food. A crucial incision about 1¼ inches in diameter, and 2 inches below the cusiform cartilage was made in front of the right rectus. The flaps were reflected, the fascia and some muscular fibres cut through, and the peritoneum cautiously opened. The great omentum was then seen spread out over the abdominal viscera. The omentum being gently pulled upon, the transverse colon came into view, and was drawn outwards, with the hope of bringing the stomach to the opening. This being accomplished with little difficulty, the great curvature of the stomach was reached, and soon afterwards the anterior wall. An opening was now made into the anterior wall, as near the lesser curvature as possible, and a tube, consisting of two parts, with prominent borders to hold the stomach up to the abdominal walls, and to support the tube internally, was introduced. The stomach then being reduced, contracted somewhat strongly, and drew the whole length of the canula, which was rather more than 2 inches, into the abdomen. Some efforts were made to raise the stomach again; but, these being unsuccessful, the instrument was simply secured, without renewing the attempts. The operation lasted an hour—chloroform being administered. A little *eau sacrée* and chicken broth were gradually introduced into the stomach, and, for some time, the patient appeared to be doing well, but eventually sank, and died twenty-one hours after the operation. After death the tumour of the œsophagus was found to be "epithelial cancer;" there was some sero-sanguinolent effusion in the left hypochondrium. The death was, by various persons, attributed to the weakness of the patient, to the effects of chloroform, to lesion of the vagus, or by M. Sedillot, to a kind of indigestion caused by the too rapid introduction of food into the weakened stomach.—(*La Presse Méd. Bruxelles*, Dec. 2, *and Archiv. Gén. Dec.*)

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THE MEDICAL TIMES.

SATURDAY, JANUARY 19, 1850.

A CORRESPONDENT, who signs his letter with the initials "C. J. B.," has erroneously attributed to us the purpose of abolishing the order of Fellowship in the College of Surgeons, through a misapprehension of some remarks made by us in a recent Article. Those remarks merely set forth the position which, for consistency's sake, and in vindication of a principle, ought to be taken up by those gentlemen who participate in Mr. Bottomley's peculiar views. It is an open question, whether, in principle, the Fellowship be a just and useful institution, or not. We have not sought, and do not now seek, to force our own opinions upon the Profession's attention; we desire chiefly to lay before it the leading views and arguments which bear upon the political schemes that attract the curiosity or the better judgment of the hour. We do not assume, that the members of the College have that extreme republican spirit which is said to characterise the society of letters, and which would desire to abolish all emblems of scientific or literary eminence in the Profession, and to bring down the proud destinies of genius to the monotonous level of mediocrity's crowded highway. This is contrary to all we have ever written, for it is in no cold and niggard spirit that we have attempted to develope the scientific tendencies of the surgeons of this country.

More contingencies, however, are dependent upon this question than our Correspondent seems to have considered. Granting that it is becoming and honourable to a scientific profession to distinguish its ablest members by titles of merit, so that they might stand before the world with the legal stamp upon their brow that gives an unchallengable currency to their worth, what becomes of the claims of unscientific members? Can the same title of honour, without absurdity, be employed to distinguish both? The College now admits Members to the Fellowship by examination, and if the Fellowship were merely a title of honour, it might do so also by nomination through the exercise of a similar power now enjoyed by the President of the College of Physicians; but if Members be admitted also by seniority, or even by the election of the Members, the Fellowship, as a title of honour, is extinct. No matter what ingenious expedients might be used to distinguish class from class, all the orders would be embraced in the Fellowship, and the scientific honour would merge into a corporate privilege.

It is simply as a corporate privilege that the recalcitrant Members of the College have hitherto regarded it. They desire the Fellowship for the sake of the vote. There may be something in the name, too, that has its attractions; but the only corporate right that would be gained by it would be that of voting for the election of Council. If one-half of the Members of the College were admitted to the Fellowship, it would be abrogated as an order of merit, which was one of its chief original intentions; and if, under the pretext of giving a vote, a still greater number of Members, or all of them were included in this order, it would be, as a distinct Institution, utterly destroyed; and the Fellows would be merely Members with a vote. To open the Fellowship very widely is to annihilate it as an Institution; and this result would equally happen, even though many aspiring young men should continue to become Fellows by examination.

What, then, should be done? We are of opinion, that it would be a prudent step to give corporate rights, *i.e.*, a vote in the election of Council to all the Members, but to reserve the title of honour for Practitioners only of eminent knowledge or celebrity. The two subjects—corporate rights and collegiate honours—are distinct in themselves, and ought not to have been united. Their union is the cause of all the embarrassments that now exist; their separation would tend to simplify and to remove the difficulties. The Council say, that they cannot open the Fellowship to the Members by the right of seniority, as it would be breaking faith with those Fellows who have become so by examination: and the Members, on the other hand, are resolved upon having a vote in the election of the Council, and can, at

the present time, acquire this right only through the medium of the Fellowship. We throw out these remarks, with the view of furnishing a clue to the labyrinth of difficulties which the subject of Medical legislation has become, by injudicious, partial, and short-sighted attempts at reform. It is a problem from beginning to end, and demands the astuteness of an Œdipus to solve its numerous riddles. Any Minister who undertakes the question as an exercitation for the display of his legislative genius will be deeply pitied.

TEMPORARY INSANITY IN CRIMINAL CASES.

In the course of the past week a woman was placed at the bar of the Central Criminal Court, charged with the wilful murder of her illegitimate child, aged about two years. The evidence on the part of the Crown showed that in January, 1848, the prisoner left the child, then three months old, in the care of a nurse; and, having visited it four times during the first three months, saw it no more until February, 1849, when she took it away with the intention, as she said, of placing it in a foreign institution, but brought it back the next night, saying that a doctor had told her that it would not live long. The payment agreed to be made for its maintenance fell into arrear, notwithstanding occasional remittances, and the prisoner does not seem to have made any attempt to visit the child again.

With the hope, apparently, of relieving herself from the importunities of her creditor, she wrote a letter to the nurse on the 26th of last November, stating that she was going to start for Spain that evening in the service of a lady who had just engaged her, and meeting a charge of unkindness to the child by alleging that she had suffered great privations on his account. The letter also contained a wish that the nurse would let the boy go to the parish, and the writer promised, on her return, to "take him and do all in her power for him;" a promise of doubtful import, since the contents of the letter were, from beginning to end, fabrications.

On the receipt of this letter, the nurse brought the child to London, with an injunction from her husband to leave it with its mother if she could be found. She was found in a comfortable situation, and the child was left with her, the nurse on going away mentioning her husband's intention to recover the money due for its support by legal process. Shortly afterwards the prisoner asked a fellow-servant to lend her a box, saying she expected "those people to summon her," and that she wished to send some clothes to her sister. In the course of the afternoon she stated that the box was packed; it stood in the bed-room that night, and on the following day it was despatched by railway to an address written at her dictation. This box, on being opened after reaching its destination, was found to contain the dead body of the unfortunate child, wrapped in an apron bearing the prisoner's name.

In the meantime the nurse saw the mother again, who said she had "got a friend to take the child;" and, in a letter containing the same statement, added, that "Providence had so provided" for her, that she had "kept it from every one in the house."

When the prisoner was taken into custody there was a great quantity of wearing apparel found in her room, and a gold watch and about twenty shillings were found on her person at the police-station. She stated to the woman who searched her that she had killed the child; "that she packed it up and sent it to her sister in the country to be buried, and she supposed it was her sister made all the noise about it; and that she should be hung."

With these facts before them the jury returned a verdict of "Not guilty, on the ground of temporary insanity."

The counsel for the prisoner, whose eloquent appeal to the feelings of the jury occasioned this verdict, thought proper to say, in the course of his address, that it had occurred to him that "medical witnesses often pronounced opinions on matters which were more within the province of a jury;" and that he knew that "on the testimony of medical men verdicts of acquittal had been procured for criminals who had accomplished their purposes with relentless atrocity." We think that the learned gentleman exercised a very sound discretion in calling no medical witnesses to support his case of "temporary insanity;" but we consider his attack upon medical testimony to have been both uncalled for and unjustifiable. The charge which his words convey is too vague and general to admit of disproof. The *onus probandi* lies on Mr. Collier, and those who agree with him, if any such persons there be. Our present object is to point out the danger of leaving a common jury to acquit criminals on the ground of temporary insanity without calling medical evidence to establish it.

We believe that the opinion of the Judges was taken not very long since, by the House of Lords, as to the evidence necessary to establish a defence on the ground of insanity, and that they held that it must be clearly proved that "at the time of the committing of the act the party accused was labouring under such a defect of reason, from disease of the mind, as not to know the nature and quality of the act he was doing:" in other words, that, with reference to the act in question, the party was unable to distinguish between right and wrong, though he might be able to do so in the ordinary affairs of life.

Now, we contend that a Medical man, and a Medical man only, is the proper person to inform the minds of the jury as to the probable effect which the circumstances brought forward as the ground of the alleged insanity would have upon the brain of the individual, and whether the state of the cerebral functions would be so far deranged as to render the party incapable of knowing that the act with which he is charged was criminal. If a party who has the ruinous consequences of a former act vividly and suddenly brought before him, at the same moment that an opportunity offers of ridding himself of the only witness to that act, is to be allowed to plead insanity as an excuse for following the natural impulse of self-preservation, society can be no longer safe.

Philosophically speaking, every crime implies a diseased state of mind at the time of its being committed. The very passions overthrow the rule of reason for a time. But temporary insanity, in order to justify an immunity from punishment, must be something more than the *furor brevis* of an ill-regulated mind. It must amount to an absolute unconsciousness of the criminality of the act committed; and, except in cases of previously notorious unsoundness of mind, cannot be satisfactorily established without medical evidence.

Even where insanity is known to have been previously existing, the safest course would be, to make it imperative on the parties conducting the defence to prove their case by the testimony of Medical men.

THE ALLEGED CASE OF HYDROPHOBIA AT QUEENSHEAD, YORKSHIRE.

Over the progress of hydrophobia, whether in the incipient or advanced stage, we exercise no influence by treatment; a case of that disease, therefore, alleged to have been cured by drugs, requires a rigid but impartial examination. Some of our readers may have heard, that the Homœopathists have lately been exulting, in no measured terms, concerning a case of rabies, which, it is asserted, lately occurred at Queenshead, in Yorkshire, and was cured by Mr. Ramsbotham, an Homœopathic practitioner residing near that village. Several other Medical men, who saw the case from one to five hours after Mr. Ramsbotham had pronounced it to be hydrophobia, unhesitatingly declare that it did not present a single symptom characteristic of that disease.

When Doctors differ, all cannot be right. We shall endeavour, briefly and impartially, to analyse the facts, and thus help our readers to form a correct estimate of the value of the case as evidence in favour of the importance of the drugs vaunted as the remedies for hydrophobia by Mr. Ramsbotham and his friends.

Divested of personal, irrelevant, and apocryphal matter, the case stands thus:—

Four men were bitten by a mad dog, June 6, 1849. Two of the four died of hydrophobia. Subsequently, one of the remaining two, named Hopkinson, became much alarmed, and lived intemperately to drown his fears. On Sunday, July 29, this man took enough ale to make him drunk. On Monday he had "a bad taste in his mouth;" to remove it, he ate onions, and drank largely of beer and coffee. In the evening of that day he suffered severely from vomiting. The next morning, (31st,) however, he was so far recovered as to go to his work. On Thursday, the 2nd of August, he felt worse, and fearing an attack of hydrophobia, he walked on the following day to Colne, a distance of twenty miles across the bleak Lancashire moors. He reached Colne at eleven p.m., cold and chill. On the Saturday morning he procured and took a famous specific for hydrophobia termed the Colne drink, and, in the afternoon of the same day, walked back again to his home, *i. e.*, twenty miles. He arrived there about seven p.m., much exhausted. On going to bed he was seized with rigors, followed by heat and sweating, and passed a restless night. On Sunday evening he felt chilly; aching pain in the hand, arm, and shoulder. Such was the history

of the case, so far as we can gather from the conflicting testimony of the man and his friends.

At four p.m., August 6th, he was first seen by Mr. Ramsbotham, who informs us, that at that time his face was flushed, the countenance expressing great anxiety, and a peculiar brightness of the eyes; there was intense thirst, a parched feeling in the mouth, no deficiency of saliva; the tongue was covered with a white fur; there was aching pain in the arm, which followed the course of the nerves, and was very severe in the neck. He said he felt sure he should be choked "unless he mended." He complained of a difficulty in swallowing, not from sore throat, but "as if something met the water in his throat."

The evidence of Mr. Fawthrop, a surgeon living at Queenshead, who saw the man Hopkinson less than one hour after Mr. Ramsbotham had left him, and about four hours after Mr. Ramsbotham had first seen him, shows that there was then "elongation of the uvula, inflammation of the fauces giving rise to slight sore throat and some difficulty in swallowing." Now, did Hopkinson manifest at any period the slightest symptom of hydrophobia? We think our readers will agree with us that he did not. He suffered simply from an attack of *angina faucium*, which Mr. Ramsbotham failed to detect. The cause of the *angina* was evidently excess, fatigue, and cold. The disease itself was trifling.

Accordingly, on examining the patient, Mr. Fawthrop at once declared, that there were no symptoms of hydrophobia present, that the illness was trifling, and would soon disappear. About four hours after Mr. Fawthrop's visit, Hopkinson was seen by Dr. Inglis, of Halifax, and two surgeons, all of whom, unequivocally, and at once, affirmed that the man was not labouring under a single symptom of hydrophobia. These gentlemen, like Mr. Fawthrop, were qualified to give an opinion from having attended the first two cases. Mr. Ramsbotham has never witnessed the fearful disease, of the incipient symptoms of which he speaks so confidently. It may be objected to our account, that we have omitted all reference to the convulsions and spasms which the man stated to Mr. Ramsbotham he had suffered, *before* he, Mr. Ramsbotham, saw him; for Mr. Ramsbotham never asserts, that he witnessed anything of the kind. We can only say we have done so after due deliberation; 1st. Because we know, from pretty extensive practical acquaintance with illiterate sick people, how likely they are to confound severe rigors with spasms or convulsions. This very day, we were told by a nurse in a large hospital, that a man had experienced an attack of convulsions early in the morning. On close inquiry, it appeared that he had really suffered from muscular tremors, from extreme nervous agitation.

2ndly. Because, from the colouring Mr. Ramsbotham has lent to the throat symptoms, which unequivocally depended on *angina faucium*, we cannot have the slightest confidence in his powers as an observer, or as an acute investigator into the past history of a disease.

3rdly. Because the man Hopkinson himself gave a very different, and much more minute account of the so-called convulsions to Dr. Inglis and Mr. Holroyd. To these gentlemen he denied having had convulsions, properly so called, but said that his legs had ached, and that, on awakening in a fright, he *thought* he felt his legs jump, and then he sent off for Mr. Ramsbotham.

Mr. Fawthrop's evidence shows clearly what the case really was; Mr. Ramsbotham's own unequivocally demonstrates what it was not, *i. e.*, a case of hydrophobia; for we regard the alleged combination, if true, of convulsions with difficulty of swallowing, unaccompanied by *any* dread of the attempt to drink, as absolutely proving, that, whatever the disease under which the man laboured, it was not hydrophobia.

For our part, we can affirm, that we have repeatedly seen all the symptoms Messrs. Ramsbotham and Fawthrop noted as present when they respectively saw the man, in patients who have recovered with rest and restricted diet; and we should as soon have thought of signing a certificate that such persons were suffering from insanity, as that they were affected with hydrophobia.

We pass by, as too contemptible for notice, the illiterate epistle of the person named Moore, which we were rather surprised any respectable Journal, intended for general circulation, should have admitted into its columns; and we pity Mr. Ramsbotham heartily for the pain he must have experienced on reading the puff direct given him by his lay friend Mr. Pope. Such testimonials can scarcely aid him in procuring "dupable" patients. Why, the veriest quacks in existence could offer evidence as good in favour of their vile and trashy compounds! Sure we are, such testimonials must lower him in the eyes of the more intelligent part of the community, as well as in the esteem of all professional men.

We shall enter on the subject of Homœopathy at some future time. In thus speaking freely on this particular case, we are in nowise considering the value of the dogma, "*Similia similibus curantur*," or the intrinsic value of decilliontbs of a grain of charcoal. The merits or demerits of the system, we acknowledge, cannot be affected by the result of an investigation into one case, the narrator of which has either displayed ignorance of the rudiments of his profession, by confounding a trifling ailment with one of the most fearful that can affect the human frame, or has attempted to supply the credulous with food seasoned for their morbid appetites. We have given Mr. Ramsbotham the benefit of the former explanation; but bad or imperfect observers must not feel hurt if, when they set themselves up for discoverers, they get credit for being deceivers.

We should be glad to hear, if this was a case of hydrophobia, why the Colne drink was excluded from all share in working the cure?

HOSPITALS OF PARIS.

[CONTINUED.]

In 1837 the number of beds in the Parisian Hospitals amounted to 16,224. Since then there has been an increase of 1478 beds, and the total is now 17,702. The number of patients treated in the general and special hospitals, during the year 1848, was 83,647, thus distributed—

Remaining in from 1847.....	5,772
Received during the year 1848....	77,875
	83,647

Of the patients, 37,743 were men; 33,555 were women, 6401 boys, and 5,948 girls. Of the whole number, were discharged cured or convalescent, 31,443 men, 28,369 women, 5253 boys, and 4883 girls. The deaths were 3627 males, 2761 females, 777 boys, 692 girls; giving a total of 7857 deaths. The Revolution of February furnished 670 wounded; the insurrection of June, 1857. During the same year, viz., 1848, the number of persons admitted into the infirmaries (*hospices*) was 29,145, of whom 1530 died; or 687 men, 832 women, 9 boys, and 2 girls.

The mean mortality and duration of treatment in the different Establishments are, of course, greatly influenced by a variety of circumstances.

In the medical wards of the general hospitals the mortality varied between one in 6 4-5 and one in 12-25. At the Hôtel Dieu and la Charité, where the most severe cases are received, it held the former proportion; at the hospital of St. Antoine, the latter.

In the medical wards of the special hospitals we find a still greater difference. At the Enfans Malades, or Children's Hospital, for example, the mortality was one in 87-100; at the Clinical Hospital, one in 35 4-5; at the Female Venereal Hospital, one in 534.

In the surgical wards of the different hospitals nearly the same proportions are observed. In the general hospitals the mortality varied between one in 9 4-5 to one in 21 3-5. In the special hospitals, it was one in 10½ for the Clinical Hospital; one in 39½ for the Female Venereal; and one in 186 for the Male Venereal Hospital. Again, if we take altogether, general and special hospitals, with medical and surgical wards, we find the following rates of mortality:—one in 10½ for the men; one in 12 1-7 for the women; one in 8½ for boys; one in 10 1-12 for girls.

The mean duration of treatment likewise varies in the general and special hospitals; or, according as the cases may have appertained to medicine or surgery. In the medical wards of the general hospitals it varies from 16 to 33 days for adults, and from 4 to 23 days for children; being, on a general average, 24 days for all. In the special hospitals, on the other hand, the mean is naturally longer, being 29½ days.

For surgical cases, in the special hospitals, we have a duration of treatment which varies from 21 to 81 days for the men, and 21 to 49 for the women.

In the infirmaries the mortality is of course still higher. For the insane it is 1 in 5 32-100; for the aged and infirm, 1 in 6¼; and in the almshouses 1 in 7, 85-100.

FOUNDLINGS AND ORPHANS.

The number of foundlings and orphans admitted during the year 1848 was 4597, of whom 2555 were boys and 2060 girls, with 161 male and 121 female orphans. 1299 of the above

were furnished from the Lying-in Hospital, 610 from the other hospitals, and 2286 from Paris. In addition, 322 were admitted from the environs, and only 80 without a registry of birth. Of the whole number 522 were supposed to be legitimate, and 4075 to be illegitimate. Besides the above, we have to take into account 1132 infants in the hospital on the 1st January, 1848, together with 1667 deposited by their parents, the police, &c., which gives a sum total of 7396 infants treated in the hospital, where they passed 193,823 days. The mortality amongst these 7396 infants was, 458 for the male foundlings; 346 for the female, (1 in 5 or 6,) 21 for the male orphans, (1 in 28,) and 12 for the female, (1 in 50.) This enormous difference arises from the circumstance, that the foundlings are received immediately after birth, while the orphans are older, and thus better able to resist disease or privation.

The children brought up in the country, under the direction of this establishment, are 17,202 in number, and the expense for the year 1848 amounted to the large sum of 66,000*l.*, of which 9,000*l.* were defrayed from the hospital funds, and the rest by the department of the Seine. Out of the 57,000*l.* thus furnished, the Medical Profession received 2,000*l.* for attendance on the infants, at the rate of 2s. 6d. per head per annum, and 1s. 8d. for each vaccination.

SIR JOHN FRANKLIN'S EXPEDITION.

(Continued from Vol. XX., p. 487.)

It has been stated, on "the highest official authority," as we before remarked, that Sir John Franklin was provisioned for the summer of 1848, and we suppose, of course, for no longer. We will assume, however, that at that time, the ships being safe, though frozen in, and their crews living, Sir John Franklin, foreseeing the probability of being ice-bound another winter, —that of 1848-49,—had managed, by dint of the greatest economy and care, not to say deprivation, to make his stores extend through the greater portion of such a dismal period. But on what, may it be asked, have the crews of the Erebus and Terror subsisted since then? In the Mackenzie River and Great Bear Lake, and, for aught we know, in the Coppermine and Great Fish streams, exists the *coregonus albus* or *white fish*, called by Dr. King the "bread of life," to the inhabitants of North America, in gratitude for its having been the provision which mainly saved his party from starvation when in search of Sir John Ross. This fish is said by Dr. King not only to be a food upon which men can live for several months together, but actually fatten, and to that resource must the crews of the Erebus and Terror trust their lives if they could reach it. But they have not, or had not reached it, for the coast line has been explored by Richardson, from the mouth of the Mackenzie River to Coronation Gulf,—nothing seen of the lost party, and not any account heard of them from the Esquimaux, to lead one to suppose that the ships or their crew had ever got so far down, and so wintered on the coast. But it must be difficult to fish when the streams are frozen to the bottom, and when the sea, near the coast, is turned into ice, even *feet* thick, as happens in the winter. It was stated, that Sir John Franklin, before sailing, had made himself acquainted with the situation and resources of the Hudson's Bay Company's posts, and that, in the event of any accident occurring, would, if he thought it expedient, push on to some of these posts, or seek the whalers in Barrow's Straits. The Great Slave Lake, the last port to the eastward of the Mackenzie River, has not been reached by Franklin, nor has news there been heard of his party; the whalers in Barrow's Straits have not been appealed to, and the Advice whaler, we have lately been informed, penetrated as far as Navy Board Inlet, and its captain went on shore at one of the Wollaston Islands. Further, the exploring party in the Welcome, alluded to by Mr. Weld, got to the isthmus connecting North Somerset with the Continent of America, and neither saw nor heard of the missing Expedition. Sir James Ross has now returned from North Somerset, and tells a like tale. It is not, then, upon the dried meat and pemmican of the Bay settlements, the fish of the North American rivers and its coast, the stores of the whalers, or the white foxes, hares, bears, or fowls of the northern parts of North Somerset, that, so far as we can believe, the crews of the Erebus and Terror have subsisted. But, in truth, let any one read King's, Franklin's, and Richardson's journeys, and then say on what they could expect 126 (138?) men to live for two years much eastward of the Mackenzie and north of the Bear Lake. The very party in search of Sir John Ross saved themselves from starvation by consuming the food intended for that officer long before they had reached the half-way house to him (King). In 1847, thus writes Dr. Rae, "Leaving two men in a snow hut in lat. 68° 48′ N., long. 85° 4′ W. to endeavour to fish and shoot," &c. "The men we had left here were well, but very thin, as they had neither caught nor shot anything except two marmots. Had we been absent twelve hours more they were to have cooked a piece of parchment skin for supper." "Only three years ago," writes Mr. Isbister, "one-half of the Hare tribe of Indians perished around Fort Good Hope, after having killed and eaten two of the Hudson's Bay Company's people who imprudently ventured beyond the gates," —"a party numbering not more than ten individuals, stationed on the borders of the largest and most productive lake in this part of the world, and, aided by all the resources of the Hudson's Bay Company, barely contrived to subsist on half-rations through the winter; while of the unfortunate natives attracted round Fort Reliance by the presence of the whites, it is recorded, that at one time from forty to fifty human beings lay dead around the place, and so scattered that it was impossible to walk in any direction within twenty miles without stumbling over a frozen body."

In 1846 dried meat and pemmican failed in the Hudson Bay Company's settlements, so that the Company could not undertake to provide for any parties travelling through the interior, and were obliged to freight an additional ship to carry out supplies of food from Europe to their own ports, (Weld.) Of the capacities, then, of the more polar regions of the North American Continent to afford food to the crews of the Erebus and Terror, our readers can now judge, supposing they had got to these regions, to some of which—the more advantageous!—we are positive they have not; and, with regard to the others, we are in the same respect pretty well certain. Is it then upon the deer, bears, white foxes, and fowl, or on the whales and seals of Melville Island, Banks' Land, Victoria or Wollaston Lands, that these unfortunate men have been nourished for the whole year, if not from June, 1848? Is it upon the produce of some favoured island, like the one of the Wollaston group visited by Captain Penny, who says: "We disturbed, on our landing, about half a dozen pairs of the eider duck, (*somateria mollissima,*) two brent geese, (*anser bernida,*) and a single pair of Arctic terns, (*sterna arctica.*) These were the only birds, with the exception of a solitary raven, (*corvus corax.*)" —*Times.* Or is it upon the ptarmigan and musk oxen of the western coast of North Somerset, more southerly than Ross has proceeded, that they have been provisioned? It is stated to be the opinion of Sir John Ross, that Franklin had pushed on so far beyond Melville-Island (110° W. long.) that he had preferred making for the Continent of America to returning in an easterly direction and seeking assistance from the Baffin's Bay whalers, (*Times.*) But, according to Sir John Barrow, the attention of Franklin was particularly drawn to the propriety of avoiding that "desolate and miserable island," (Melville;)—(Barrow's Arctic Voyages, p. 114;) —so that, according to his orders or advices, we may presume he had no business there. Let us still suppose, for the sake of argument, that thereabonts he has become besieged by ice and snow. At this spot, during a stay of nearly twelve months, the following amount of provisions was procured by Parry when detained there in his first voyage;— 3 musk oxen, 24 deer, 68 hares, 53 geese, 59 ducks, 144 ptarmigan; these, amounting, in weight, to 3,766 pounds of meat, affording to each of 94 men 3½ pounds per month; and this quantity is the produce of an island stated to exceed 5,000 square miles in surface ("Barrow," op. cit. p. 116). Now, of the creatures above enumerated, not one, in all probability, except rein-deer, could be procured after the middle of September; so that, in this spot, this "desolate region," all provisions for the winter would have to be hunted for and preserved in the summer season. The rein-deer, too, migrate from the island before the end of October, leaving only wolves and foxes there during the long winter months. Not even the Polar hare, or seals, gulls, or ducks, "condescended to visit Melville Island; but two or three specimens of a caterpillar were obtained, one of which was brought to England."—(Parry's First Voyage.) Even the procuring or hunting any animals, when and where that can be effected in these regions of the Ice King,

> "Where frost
> Reigns everlastingly, and ice and snow
> Thaw not, but gather,"

is constantly attended with great risk from snow-drifts, frost-bites, and "snow-blindness;" the former peril endangering the personal safety

of the whole party who may happen to wander any distance from the ship. However, it is yet open for us to imagine that Franklin has *avoided* the "island" and pushed *beyond* it. But how far he has proceeded who can tell? *This* we, unfortunately, *are* aware of,—that his progression has not been so far as to enable him to come home again. What detains him, then? Is it—how fearful the conception!—that the command of his ships has been taken out of his hands, their screw-propellers rendered useless, and that they lie motionless and powerless "in the centre of a field of ice more than fifty miles in circumference?"—an imbedding which occurred this year to Ross, but from which dreadful encasement his vessel was quite unexpectedly released as if by a "miracle," "as if by some unseen power."—(Ross's Narrative.) If such should have happened, on what kind of sustenance have the crews subsisted? Are even bears and snow-buntings to be found? What resources for feeding his men Sir John Franklin might discover on the western coast of North Somerset or Boothia, more southerly than Ross could take his exploring party, supposing Franklin has got there, no one can positively say, since no one has been there; or of what he might find on Victoria or Wollaston Lands, we are equally in ignorance; but what he might *probably* meet with, few, after reading our remarks, we believe, can hold much doubt about the matter. With regard, however, to these latter stations, Sir John Richardson, in his late narrative, thus promisingly speaks:—"Deer migrate over the ice in the spring from the main shore to Victoria and Wollaston Lands in large herds, and return in the autumn. The lands are also the breeding-places of vast flocks of snow-geese; so that, with ordinary skill in hunting, a large supply of food might be procured on their shores in the months of June, July, and August. Seals, also, are numerous in those seas, and are easily shot, their curiosity rendering them an easy prey to a boat party. In these ways, and by fishing, the stock of provisions might be greatly augmented. And we have the recent example of Mr. Rae, who passed a severe winter on the very barren shores of Repulse Bay, with no other fuel than the withered turf of a herbaceous Andromeda, and maintained a numerous party on the spoils of the chase alone for a whole year." We have not yet closed this subject, but shall conclude it in our next.

"WHAT ARE THE METROPOLITAN COMMISSIONERS OF SEWERS DOING?"

So asks the *Times*, and we wish that we could answer it. The mysterious personages in question have already evinced so obstinate a determination to keep the public in the dark as to their proceedings, that we suspect they are not doing much good. Verily, we are a patient people! That is, we are patient in all matters which come under our very eyes and noses. We have abundance of indignation ready at a moment's notice, if any barbarity is committed two or three thousand miles off; but things at which our barbarous brethren would blush, are submitted to without a murmur. Our burial grounds are bordered by the spacious mansions of the rich, or the crowded dwellings of the poor, and the reeking soil is turned up daily and nightly; while, in some of the most densely populated neighbourhoods, the curious may see how the ingenuity of parochial officers can pack the bodies of twenty or thirty paupers in one hole. We not only allow a noble river to be contaminated by all the filth which our metropolitan population can generate, but we pay, for the privilege of introducing the noxious fluid into our houses, three times as much money as ought to buy us a twofold supply of pure water.

Still, as we have already intimated, we are capable of excitement. Our farmers clamour for protection, and our little boys cry for the moon. Let but the King of the Cannibal Islands come upon 'Change as a borrower, and straightway a public meeting will be held to frighten English merchants from doing what they like with their own money. Five thousand gentle creatures in sober-coloured garments will weep over the immoralities of the Chickabiddy Indians, and club their half-crowns for the devoted orator who has made Exeter-hall ring with his eloquence, and then go home in happy unconsciousness, that within a few yards of their pretty villas there are many houses, in which, from ten to thirty persons of all ages, and both sexes, are nightly huddled together in one small room.

If we could but collect a tithe of the enthusiastic zeal and earnest feeling which is now wasted and thrown away, and set it to work in the right direction, we should not despair of shortly finding out even what the Metropolitan Commissioners of Sewers are about.

THE *EDINBURGH REVIEW* AND THE MEDICAL PROFESSION.

In an otherwise interesting article on the general Sanitary question, the *Edinburgh Review* of the present quarter alludes, with somewhat of regret, to the jealousy felt by the Medical Profession as to the constitution of the present London Board, stating, however, in no very equivocal terms, that they cannot regret the circumstance, that its chief leader is not a Physician. "It is very necessary," says our blue-and-yellow friend, "that such a department should have the best scientific council the country can afford; but,"—yes, *but* is always near when it is necessary to prove something very out of the way—"but, on the other hand, it seems indispensable that an administrative body coming in contact with constitutional rights"—rather say, for the good things of Downing-street—"should have another kind of leadership." "The Medical body, too, have defects," continues our wise cotemporary, "in their jealousies and prejudices, which unfit them for such a position." Now, without at all granting that these little differences of opinion would unfit any of the Profession in the way alluded to, we would ask, have the other Professions no little battles and prejudices?—are the Guards and the Line as amiable towards one another as could be wished?—are naval officers contented in their relative positions?—is the Gorham case likely to remind us of the true quality of Charity? Then the law—shall Charles Dickens not be made minced-meat of for letting out the secrets of the Court of Arches, and that funniest of all abstractions, the Court of Delegates? Yes, of course, every profession and every calling, where *opinions are to be formed*, have their minor differences; but that such should be gravely put, in bar of the proper carrying out of such profession, is simply absurd. We may differ from Mr. Guthrie about College arrangements; but is there a man in the Profession that does not respect his views as a Surgeon? The opinion is hazarded by the *Review*, that Nelson would never have obtained high command from a board of old Admirals; "nor is it uninstructive to remember," it adds, "that the idea of sanitary reform did not originate *within* the Medical Profession." According to the *Review*, the constant direction of the Faculties to the cure of disease, does not leave much time to devote to the study of its external cause. To prove this very questionable position, we are carried back to the times of Greece and Rome, and to the pipes for sewers and aqueducts planned by the great men of those times—at the suggestion of physicians we would say;—but we shall not discuss that point, resting satisfied with the facts, that ALL that is known on sanitary matters is due to the Profession, and that, without the knowledge possessed by the physician of the relation of the human organization to air, and light, and water, and the many other agents that surround us, the subject would have no existence at all.

The great catholicon of the *Review* seems centralization, with some noble Lord at the head, responsible to Parliament. Why not a Medical man responsible, we would ask? The noble Lord, of course, is not to tread on the toes of the Chancellor of the Exchequer by talking of abolishing the window-tax: he is, of course, to be on a perfect understanding in that way. Our Medical friend might, on the contrary, be very troublesome, talking of air and light, and repeating Mrs. Somerville's experiments. None regret the little jealousies of the Profession more than we ourselves, yet we feel it would be an insult to the common-sense of our readers to say that anything of the sort could bias the opinion of any one man in the Profession on the all-important subject of Sanitary Reform. We trust our Northern Contemporary will give us credit at least for this, if he venture again on the subject. Without the general intelligence of the Profession, and the eminent services of Mr. Farr, the Registrar-General's Reports would be a *tabula rasa;* and without a more general recognition of this intelligence by the State, Sanitary Reform will ever be *in nubibus*.

SINGULAR INCIDENT IN A MADHOUSE.—The *Boston Herald*, U.S., mentions that some time since a singular and romantic incident occurred in the City Lunatic Hospital. A mother and daughter (emigrants) both became inmates at different dates, and were placed in the same storey of the building, where they had access to the same hall. They met and recognised each other, though one had left the other years ago in Ireland. They had each crossed the ocean, become residents in New York, and lost all knowledge of the other's history or fate; both became bereft of reason, and in a madhouse, surrounded by those who were hopelessly insane, the child and parent met; though reason was dethroned, and they were there with minds diseased, yet nature triumphed over the clouded intellect, and for a brief moment they conversed on the land of their birth, and of their separation.

PUBLIC HYGIENE.

DRAINAGE: AS IT AFFECTS THE HEALTH, WEALTH, AND MORALITY OF SOCIETY.

No. III.

Difficulty of laying down a regular System of House-draining.—An Approximation thereto.—Materials and Structure.—Form.—Dimensions.—Construction.—Pumps.—Protection of Inlets.—Cesspools.—United Back-drainage.—Water supply.

To display the shocking condition of our metropolitan sewers and drains, and the various dangers attending that condition—both as to health, and also with reference to the chances of injury by the imminent danger there exists of some of the sewers falling in—was our anxious task in the first Number of these papers. To point out the principal defects in our house-drains, not merely as to condition, but with regard to their original construction, which in several respects renders their foul and inefficient state within almost inevitable, was our object in the second paper of this series. To propose more correct principles of construction, and to explain their main features, is our present far more difficult business.

The attempt would, no doubt, be sufficiently arduous in any case; but, inasmuch as the regular system of metropolitan drainage which the Commission of Sewers has promised to lay down, has not yet been determined—with all the engineers and surveyors at their command, long experienced in this special department, not to mention the privileges and powers of the Commission in other respects—it would be the greatest presumption in any individual to step forward with a positive system assumed to be complete in principle and detail. Under these circumstances, we would have it understood that what we propose must be considered as subject to the correction of further experiments; but at the same time we may promise our readers that the main principles about to be laid down will at least be greatly in advance of any of the ordinary systems and practices at present adopted.

We cannot do better than give a statement of the correct method of drainage under the same heads and in the same order as we adopted in our second paper, when speaking of the evils of the ordinary systems of house drainage now in practice.

Materials and Structure.—Instead of bricks for the building of drains, even if they were of the best quality, and cemented together in the best manner, we would still recommend the use of clay or stone ware tubes as preferable in the great majority of cases. They should be smooth inside and impermeable. The joints of each of the lengths of tube should be so contrived as to fit perfectly, yet with a facility of displacement for examination; and they should not be liable, at the same time, to get accidentally displaced. For these combined advantages, all things considered, the half-socket joint is the best.

The following Table is taken from the first Report of the Metropolitan Sanitary Commissioners.

Table of Comparative Time of Run of Water through Brick Drains and Glazed Pipes.

Inclination.	Depth in Water.	Time through Glazed Pipes.	Time through Brick Drains.
	Inches.		
Level	5	38	50
2 in. in 50 ft.	4½	16½	25
1½ ,,	5½	19	27
2½ ,,	3	18	26
6½ ,,	3½	25	36
3½ ,,	4	15	22
3½ ,,	6	13½	21½

Form.—Having stated that, in place of the old brick-built drains it would be advisable to adopt clay or stone-ware tubes, it will be obvious that the form suggested is that of a circle. But although this is greatly preferable to any of the other forms which have been usually chosen, we do not see why the last improvement in the shape of the sewers, put forth by the Sanitary Commissioners in their first Report, as the result of innumerable experiments by the most experienced surveyors and engineers, should not be equally available for house drains. Admitting all necessary exceptions in peculiar cases, we think that an egg-shaped tubular drain would be preferable to all other forms. The broader end of the egg-shaped tube should be uppermost. Not to dilate upon experiments and technicalities, which would occupy more space than we can afford, it may here be sufficient to say briefly, that the egg-shape presents fewer facilities for stagnant accumulations; it has the best form for a regular flow of sewage,—the deepest space below for an ordinary stream, with the largest space above for accidental storm-water or other floodings; and is, moreover, the best form for being cleansed by flushing or any other process. In all cases, however, the rational choice rests between circular and egg-shaped tubular drains.

Dimensions.—One of the most important results of experience and experiment is in the reduced dimensions of sewers and drains. Instead of a drain of a foot square, which was commonly given to a house of the smallest class that had any underground drainage at all, it is now known that, with a proper inclination, a three-inch tubular drain will not only be large enough, but that this same three-inch tube, properly inclined, will be sufficient for eight houses of the same kind. It will, of course, be understood, that the area to be drained should not be unnecessarily large, that is, not exceeding 2,500 square feet. Larger houses will obviously require larger drains, viz., tubes of four inches, five inches, and six inches diameter at the largest. As a general principle, it may be stated, that the smaller the tube and the greater the inclination, (according to the previous proportions,) the more efficient and certain will be the drainage. The same principle should be kept in view in all the smaller drains of the house—closet-drains never exceeding three inches in diameter; while those of sinks, yards, areas, and rain-water pipes, should seldom be larger than two inches in diameter.

Construction.—A proper flow of sewage can never be obtained without sufficient inclination of the drain. A child might understand that; and yet it is really necessary to state this in the broadest manner, from the simple fact of this obvious principle having been so frequently disregarded. And here another advantage of the reduced dimensions of drains will be apparent. "Where, for instance," says Mr. Donaldson, "nine-inch barrel drains" (on the old brick-work construction) "of ninety feet length, could only be laid on a dead level, a four-inch pipe-drain would be laid with a fall of 1 in 120. Sixty feet of length, which would be level in brickwork, would, with the pipe-drain, be laid at 1 in 80; and thirty feet of length would be laid at 1 in 40; a saving of nine inches being effected, and the difference of the dimensions of the drains, and the thickness of the material."

In the junctions of branch-drains all right angles or other abrupt entrances should be most carefully avoided. The branch-drains should be led into the main or larger drain by a gradual curve, sweeping down at its point of entrance to a level with the bottom of the larger drain. No junction should ever be made at the top of a drain. Junctions made in vertical pipes of any kind should be made by a curve sloping down into one side. The size of the junction pipe at its point of entrance should always vary with the dimensions of the main or larger drain, so that there should never be any need for enlarging the latter in order to receive the branch current.

Traps.—The numerous inventions and patents for this important little piece of mechanics, which is so necessary to the attainment and preservation of a "sweet house," may all be reduced to two, viz., the water-trap and the flap-valve. All the others, at present known, are modifications of these. The flap-valve is excellent, so long as its action can be kept in perfect condition; but this is very liable to be disturbed, and its effect defeated by the least substance adhering, so as to prevent the perfect falla nd closing of the flap. The water-trap is, therefore, preferable for all house-drains; and the best of this class is ascertained to be the syphon. It is the most effectual in its action; it is less liable to deposits; it can most readily be cleared; it is least liable to displacement; and it is the most economical. For all house purposes—drains, closets, sinks, areas, yards, &c., it is the best of all the numerous tribe of traps hitherto invented. Double and triple syphons may also be used, at times, with great advantage, by which means several pipes may often be trapped by one syphon. Finally, care should be taken that the syphon should always be of the same size as the drain or pipe into which it leads.

Protection of Inlets.—It is important that the greatest care be taken to prevent the entrance of improper substances into the drains and pipes. The openings, therefore, of all kinds, should have protections fixed, or at least moveable only by a proper tool, and not by hand; while, with respect to those openings which are necessarily left unguarded, strong injunctions should be laid on everybody in the house against throwing down rubbish or any improper substances.

Cesspools.—Concerning these odious old monsters, the long-continued curse of our houses, the polluter of our air and of our water, the generator of bad odours, of bad health, of sicknesses and fevers in all their forms,—the rich man's secret enemy, the open destroyer of the poor,—the friend of long doctor's bills, and of the undertaker,—the *protége* of the lowest degree of poverty, of filthiness, and of ignorance,—the greatest and most insidious reproach to science, civilization, and the parish authorities,—there is only one thing to be said,—abolish them all for ever. Put decent closets in their place, draining down into the main sewer, and in the ledge of the nearest window a row of garden-pots, where mignionette and his favourite London-pride might help the denizen of a crowded street to lose all memory of his pestilent foe.

United Back-drainage.—A very great advantage, both in efficiency and economy, may be expected from the adoption of a system of united back-drainage of a street, or number of houses, (wherever practicable,) as recommendad by Mr. Donaldson and other Surveyors of the Commission of Sewers. Instead of carrying all the drainage through the house into the street, (most of the inlets to the drains and pipes being at the back of the house,) it may easily be understood, that all the drains being carried from every house in the street into one main line at the back, would be a great saving of expense in the length of the drains, and it would also prevent the chances of effluvium in cases of accident and repair.

Water Supply.—A proper supply of water is essential to good drainage. In the present uncertain and transitional condition of affairs with respect to the grand system of drainage which we expect to be laid down and carried out by the Metropolitan Commission of Sewers, it is difficult to say what should be done in the matter of the water-supply. This, however, appears clear,—there must still be in-

curred the expense of tanks or cisterns; but, in the building of new streets, it might surely be managed by the landlord that one large tank should supply half-a-dozen houses. Eventually, however, we confidently anticipate, that the expense, inconvenience, occupation of space, and trouble of cisterns, (especially during a hard frost,) will be totally done away with, and the water be laid on to every house in sufficient abundance for all domestic purposes, and for the promotion of good and unfailing drainage of the premises.

REVIEWS.

An Address delivered on the Opening of the New School of Medicine, Surgeon's Hall, Edinburgh, Nov. 6, 1849. With an Appendix. By ALEXANDER WOOD, M.D., F.R.C.P.E. Lecturer on the Practice of Medicine, &c. &c.

The Introductory Lecture delivered by Dr. Alexander Wood at the opening of the new building for the Edinburgh Extra Academical Medical School, has been published. Dr. Wood is still young, but is well known in Edinburgh as a clever speaker and popular Lecturer, the author of "Homœopathy Unmasked," and of "A Sequel to Homœopathy Unmasked." The Lecture contains a great deal of instructive observation, addressed to the student, accompanied with much ingenious and eloquent illustration of the topics introduced. It is impossible, within a small compass, to state the substance of such a Lecture. One or two specimens must suffice.

"I am aware," he says, "that the student too often prefers that teaching which stores his memory without exercising his judgment. This arises from the Utilitarian tendency of the present age, of which a chief characteristic is that, in knowledge, as in everything else, an immediate advantage is demanded." . . . . . "Give us that information which will serve us in the real and practical business of life, is the almost universal cry. And we will not dispute, that in this age of bustling and jostling contention—when the ingenuity of man is sharpened by necessity, and when everything is brought to bear on the business and ordinary transactions of life, such considerations are imperatively demanded. But let us well weigh, and maturely consider what is the really, the practically useful. If, as we have attempted to show you, every fact involves a theory, and if both are inseparably connected in the building up of a science, and if theory is only to be rightly formed and securely constructed by the reasoning powers of man, is it not by cultivating these powers and by directing them into this new and somewhat peculiar channel, that your minds will be best formed to think on such subjects, and to think correctly."

Such sentiments cannot but meet with the general approbation of the thinking part of the Medical Profession; for undoubtedly one of the first things that should be impressed on the mind of every Medical Student at the very outset of his studies is, that the course prescribed for him is designed for the twofold purpose of supplying him with a sufficient amount of practical knowledge for daily use in his after-life in the treatment of disease, and to train his mental faculties to a correct method of thinking in regard to the phenomena of the animal economy—that is, in obedience to the spirit of the laws which govern these phenomena in health and disease.

Such views as the following cannot be too strongly urged on the attention of the student, as well illustrating the extent to which superior skill may conduce to success, notwithstanding that the art of medicine is not one in which failure can be positively averted:—

"All the agencies of nature are not at your disposal, nor are all the powers of life obedient to your call. But just as the skilful pilot directs his vessel, and trims and changes its course agreeably to the laws of his art, as the winds or tides, which he cannot control, may affect it; just as the judicious husbandman uses all the means which ordinarily secure a plentiful harvest, though he cannot bid the sun shine or the dew descend, or prevent the nipping frost or disastrous hail, so the physician will seek to treat his patient agreeably to those laws which Nature herself has taught him; and knowing that contingencies may arise which may frustrate the best-laid plans and baffle the most judicious management, he will seek to labour in subordination to Him in whose hands alone are the issues of life and death."

Dr. Wood, in the outset of his Lecture, quotes a passage from Herschell, on which, in as far as it is applicable to medicine, much instructive comment might be made.

"Medicine," he says, "is at once a science and an art. But as a living philosopher observes, art is the application of knowledge to a practical end. If the knowledge be verily accumulated experience, the art is empirical; but if it be experience reasoned upon, and brought under general principles, it assumes a higher character and becomes a scientific art."

To what extent, then, is Medicine a scientific art? And, first of all, what examples can be found of unequivocally scientific arts? The art of constructing and repairing steam engines, as also the art of constructing and repairing clocks, watches, or time-keepers, are scientific arts; for in both cases, every part of the mechanism depends on known principles of science. Medicine, that is the art of curing, palliating, and preventing disease, is not a scientific art to the like extent; for we cannot so certainly explain the relation between the operation of the medicines used and the effect on health which follows their use, as to devise plans of treatment at once on this understanding. Every plan of treatment must be judged of by its immediate effects, and changed or continued according to the indications supplied by these. Again, medicine is not merely an empirical art; because, even when the numerous applications of science to the description and diagnosis of diseases, and to the discovery and preparation of medicines, are left out of view as belonging to the preliminaries of the art rather than to the art itself, there is still no small share of science left, in the shape of general principles, applicable to the choice of remedies for the treatment of various groups of diseases,—as fevers, periodic, continued, and eruptive, acute inflammations, active hæmorrhages, comatose diseases, convulsive maladies, dropsical effusions, dyspeptic complaints. Yet, how far the art of curing diseases is, and long must be, from being a scientific art, in the same sense in which the repairing of steam-engines and that of time-keepers are scientific arts, must be manifest at a single glance. The question, how far medicine, on the one hand, is a scientific art, and how far, on the other, an empirical art, is a proper subject for arithmetical computation, and such a statement, drawn up in a trustworthy manner, would be highly instructive. But, whatever might be the result, it is certain that no one is competent to practice medicine, even within those limits in which it is an empirical art, whose conceptions of what is required of him are not framed in the spirit of physiological science; because, without the impress of that kind of knowledge on his mind, he is not capable, for the most part, of perceiving exactly the occasions to which his empirical remedies are applicable. Thus, science in medicine does not so much aid the art itself, by making it scientific, as it renders men competent to put in practice with success the empirical rules which time has accumulated. It adds to the senses new powers of observation; to the judgment, new means of discrimination; and daily affords to experience fresh opportunities for exercise.

TORBAY INFIRMARY.—A sum of 300*l.* is about to be expended in changing the style of architecture of the front of this building, from the Italian to the Tudor. True charity would dictate a better mode of employing the money.

REPORTS OF SOCIETIES.

WESTMINSTER MEDICAL SOCIETY.

F. HIRD, Esq., President, in the Chair.

TUBERCULAR DISEASE OF THE LUNG—HERNIA.

At the meeting of this Society,—

Mr. Haynes Walton presented a well-marked example of the conversion of tubercle into earthy matter. It was taken from the lung of a patient who had been under Dr. Taylor, of Guildford. She was aged 40, and had been subject to palpitations for six or seven years. Dr. Taylor had attended her frequently during the last six or seven months for chronic bronchitis. She had improved under mercurials and counter-irritation over the larynx. Mr. Walton had been called in to apply nitrate of silver to the larynx. She died suddenly on the 18th of this month. There must have been originally a very large tubercle, for there is a large cartilaginous cicatrix, and much puckering of the surrounding pulmonary substance. The earthy deposit is bigger than a pea, and of stony hardness. The cavity that contains it is lined by a smooth membrane. Except some lobular emphysema, the rest of the lung was healthy. The right lining had miliary and crude tubercles in each of its lobes. There was considerable disease of the heart. The consolidated aortic valves were exhibited. The most interesting morbid part, the larynx, which was œdematous, was left behind by accident.

Mr. Erichsen then related four cases of hernia that had, amongst others, occurred to him during the last few months, and that presented some features of unusual interest. The first was a case of strangulated congenital inguinal hernia in a young man, the diagnosis of which was rendered very obscure by the presence of a very large quantity of fluid in the tunica vaginalis, and by the fact of the tumour, though containing strangulated bowel, being perfectly soft and fluctuating throughout, and partly reducible with an emphysematous crackling. On cutting down upon it, the stricture was found at the internal ring, where the coil of intestine was confined by very firm adhesions, and separated by a distance of more than two inches from the testis, which lay in its normal situation. The patient had a smart attack of peritonitis after the operation, but eventually did well. The second case was peculiarly interesting, from its bearing upon Petit's operation. The patient was a young man, who had suffered from reducible right inguinal hernia from birth. At the time of the operation, it had been strangulated about fifty hours. There was feculent vomiting and much peritoneal inflammation. The stricture appeared to be at the external abdominal ring. This was freely divided, the sac having been opened; but still it was evident that the cause of constriction had not been removed. The contents of the hernial sac, which were composed of omentum and a knuckle of dull intestine, were well drawn down, when it was found that a very firm, narrow band of pale fibres tied down one side of the coil of gut. This had no connexion with the sac, but stretched across from the mesentery to the omentum. It was carefully dissected off the bowel, which, together with the omentum, was then returned. The patient died of the peritonitis, which was very intense before the operation. Mr. Erichsen remarked, that had the sac not been opened in this case, the stricture at the external oblique merely having been relieved, the intestine would have been returned still strangulated by the narrow band of fibres, the case being one of internal strangulation in an incarcerated hernial sac. The third case was one of femoral hernia, operated on without opening the sac. The stricture here was occasioned by a firm band of fibres lying upon the neck of the sac, and constricting it in an hour-glass shape. This was carefully dissected off the sac, when the contents went back with difficulty. This case was interesting from its bearing upon the operation that had been proposed, of dividing the stricture by a limited external incision. This could not have been done here, as the stricture lay very deep at the neck of the sac, and required full exposure of this. The fourth case was of a very large hydrocele of the hernial sac. The patient, about forty years of age,

applied to Mr. Erichsen, with a tumour as large as a child's head on the right side of the scrotum. He had had hernia there for twenty years. Of late years it had only been reducible to a partial extent, and had recently increased very rapidly. The upper part of the tumour was found, on examination, to be composed of reducible hernia; the middle portion of adherent omentum; and the lower part of fluid; below which lay the testis, quite healthy. The fluid tumour was uniform below; irregularly circumscribed above; was reducible on pressure, and soft and fluctuating. From the history of the case, and careful manipulations, the diagnosis from encysted hydrocele was made, and the tumour tapped, when about three pints of very dark chocolate-coloured fluid were drawn off.

PERINEAL ABSCESS.

The following case was narrated by Mr. Hancock, surgeon to the Charing-cross Hospital:—He was called during last July to a gentleman suffering from extravasation of urine. He had suffered from stricture for nineteen years, and had had the stricture divided through the perineum, and also the bladder punctured through the rectum, but without any relief, as in the first instance the wound in perineo had been allowed to heal up without any attention being paid to the urethra. Mr. Hancock treated the extravasation in the usual way, and, in the course of a few days, with the patient's consent, again divided the stricture through the perineum. He kept the wound in the perineum open by passing a No. 10 gum catheter into the bladder, until he could easily introduce a No. 11 silver catheter along the urethra into the bladder, when he allowed the perineal wound to heal, and the patient is now recovered.

He considers the case of interest, as bearing upon the questions mooted during last session with reference to the treatment of abscess in the perineum connected with obstinate stricture of the urethra, and also with reference to the operation for opening the urethra from the perineum, and its after treatment, especially in relation to the employment of the catheter; that when the abscess is unconnected with opening into the urethra, it is better to abstain from the employment of the catheter, notwithstanding the patient may experience difficulty in passing his water: but that, where such complication exists, which he believes is most frequently the case, the employment of the catheter should be carefully attended to, particularly when it has been found necessary to open the urethra through the perineum, in which case he thought the instrument ought never to be entirely discontinued. To this cause he attributed the failure of the first operation in the case just related, as well as in others to which he directed the attention of the Society; the catheter had been neglected, the parts allowed to heal and contract, and so the patients became as bad as ever.

In conclusion, he offered some remarks on the usual perineal operation. He considered that the difficulties of its performance were greatly enhanced by the situation at which the urethra was usually opened, the opening being made towards the anterior part of the membranous portion of the urethra, which is sometimes completely cut across, so that when the catheter is introduced and passed along the anterior part of the urethra, it comes out through the wound, but the posterior part having nothing to support it, the sides of the canal fall together, close up, and great difficulty is experienced in hitting it with the point of the catheter. This difficulty may be obviated by making the opening in the urethra further back, close to the front of the prostate gland. In performing the operation the surgeon will be greatly assisted by recollecting that the urethra passing through Couper's ligament, corresponds exactly to the point in the raphé of the perineum, midway between the posterior roots of the scrotum and the anterior margin of the anus, so that a knife plunged straight in at this point will reach the membranous portion. After describing the various steps of the operation, he concluded his paper by observing that the catheter employed should be sufficiently large to fill the canal of the urethra, otherwise the portion of the urethra behind the stricture, when divided, will fall together, and the point of the instrument catch, and thus be prevented entering the bladder.

MEDICAL SOCIETY OF LONDON.

H. Hancock, Esq., President, in the Chair.

THE OTOSCOPE—AMAUROSIS CURED BY ERYSIPELAS.

After some observations by Dr. Cogswell on the propagation of cholera throughout the United Kingdom in 1848-49, to prove that the facts connected therewith were in no way opposed to the doctrine of contagion, Mr. Harvey exhibited an instrument, called the Otoscope, the object of which is to ascertain the permeability of the Eustachian tube, by placing the bell over the patient's ear, and directing him to expire, with the mouth and nose closed, so as to drive the air into the cavity of the tympanum, its impulse against the membrane being transmitted through the tube to the ear of the surgeon. Mr. Harvey was of opinion that the use of this instrument would enable the surgeon to dispense, in a great degree, with the use of the catheter for the Eustachian tube; as, if it were not obstructed, its permeability could be discovered without it. He believed that Eustachian catheterism was practised far too frequently, and alluded to cases in which that operation had been performed, while the tube and adjoining parts were in a state of active inflammation. He was further of opinion that "tonsil snipping" had been practised to an enormous extent, with the professed view of relieving or curing deafness, with which it was in no way connected.

Mr. Hancock mentioned the case of a plethoric man about 38, who had been under his care in the Charing-cross Hospital for amaurosis of two years' standing, which Mr. Hancock supposed to depend on cerebral congestion. He could not distinguish light from darkness. He was cupped and bled, and had small doses of blue pill for six weeks, but without benefit. He then had an attack of rheumatic iritis in one eye, which, after the lapse of three weeks, was succeeded by a severe attack of erysipelas of the head, on the subsidence of which the man could distinguish light from darkness. After this, vision gradually improved, and is now fully restored in one eye, and nearly so in the other,—the one that had been affected with iritis; the impairment of sight in that eye Mr. Hancock referred to the effects of the iritis, and not of the amaurosis. He (Mr. Hancock) remembered the case of a preventive service man, stationed at Margate, who was a patient under Mr. Guthrie at the Ophthalmic Hospital, about twenty years ago, for amaurosis. The long issue in the scalp was made in this case, and caused a violent attack of erysipelas, which, as in the preceding instance, was followed by recovery of vision. Mr. Hancock thought that these two cases taught the lesson, that in the treatment of amaurosis we do not push the practice of counteraction vigorously enough. Cupping, bleeding, issues, and setons were useful agents, but not sufficiently powerful in many cases to cure this formidable disease.

Mr. Dendy observed, that the very interesting cases narrated by Mr. Hancock were supported by analogous instances occurring daily in the practice of infantile diseases. In cases of morbid conditions of the brain, as indicated by the state of the pupil, &c., where there might be amaurosis, but the patients were too young to recognise it, the occurrence of a papular or other eruption on the scalp was sufficient to remove all the threatening cerebral symptoms. The connexion between the two was well-marked; for, in those cases in which the eruption was repelled, the symptoms of brain affection recurred.

SYRO-EGYPTIAN SOCIETY.

January 8, 1850.

David W. Nash, Esq., in the Chair.

Dr. Charles F. Zimpel read an account of his recent travels in Syria. Starting from Beyrout, the Doctor followed the coast to the Dog River, whence he took a north-easterly course to the ruins of Fokra. These ruins are situated in a valley surrounded by lofty mountains, and part of them occupy an elevated position at the margin of a deep and wild precipice. The ruins are very extensive, but in a very dilapidated state. The most perfect of all is a small building, forming a cube of about thirty feet, with a small pyramid at its summit. The entrance is on the north side, near which the Doctor copied the fragmentary inscription Γ'ΕΝΤΕΠΙ-ΘΟΛΟΝ. In the interior are small compartments, probably sepulchral chambers. Near to the ruins is a natural bridge, about 180 feet high and 100 in length.

Hence the Doctor proceeded by the beautiful vale of Kadisha to Hosrun, Kanobin, Aden, and Beshewe, and thence back to Tripoli to obtain horses for Hosn Sphyre, (commonly called Kalaat el Hosn.) Hence he visited Akkar, the Area of the Romans, who placed it in the northern part of Phœnicia, and a leading stronghold, in after times, of the so-called "Assassins." Dr. Zimpel's notices of these different mountain sites were very detailed and satisfactory.

After a visit to Safitta and the Island of Ruad, the Doctor proceeded from Tortisa, by the coast, to Latakiyah, one day's ride from which he visited the Castle of Sahium, or Sayum, which he believes not to have been previously described. This extensive fortification is, in most parts, as perfect as in olden times, excepting the buildings in the interior, which are mostly in a ruinous condition, is situated at the extreme point of a well several hundred feet in height, between two valleys with mountain streams, so that it forms the fork between them. The base of the triangle thus formed is separated from the continuous land by an artificial cutting in the solid rock, about sixty feet in breadth, by a depth of more than a hundred feet. A pillar is left standing in the cut for the support of a bridge. The most perfect building in the interior was that which contained the well. It has a large hall, with vaulted roof about sixty feet in length by twenty-five feet in breadth, a stone staircase leading down to the water, which was excellent. The buildings and works of defence showed evidence of changes and of different epochs in history.

From Latakiyah, Dr. Zimpel proceeded to Suedia, (Seleucea Piena,) whence he made excursions into the Jibal, Kaisenick and adjacent country. He next travelled by way of Daphne, Antioch, Jisr Hadid, (Pontisfer of the Crusaders,) Herem, and Dana to Aleppo, returning to Edlip, Reiha, Kefr el Bara, Kalah el Medek, (Ahamca,) Hamah, Homo, the sources of the Orontes, and Baalbek to Damascus. It is impossible to follow Dr. Zimpel in his description of the many objects which presented themselves to him in so comprehensive a journey; but he dwelt particularly on the extensive ruins of towns, monasteries, and churches of the early Christians to be met with in the mountains around Dana, (Mount St. Simon, &c.,) and near Edlip, Reiha, and Kefr el Bara, and which it is to be regretted have not, as yet, been visited by competent artists. Dr. Zimpel also states, that at Apamca, at the west end of the city, he found a colonnade of from 18,000 to 12,000 feet in length, consisting of four rows of pillars with a space of about thirty between each double row. The pillars were thirty feet in height, some standing, many tumbled down, of the Corinthian order. There appear to have been small edifices at intervals on each side of the colonnade, and at the extremity large and extensive buildings.

CORRESPONDENCE.

MR. McCLURE IN REPLY TO MR. CHUBB AND DR. MILLAR.

[To the Editor of the Medical Times.]

Sir,—Mr. Chubb's letter, which appeared in your Paper of the 22nd instant, demands some notice from me. I dislike dealing in personalities, but, at present, justice to my own character and professional reputation calls upon me to refute the statements put forth by him.

I may premise, that the Report which he so ungenerously attacks was originally prepared at the request of Dr. Gavin Milroy, one of the Inspectors acting under the General Board of Health; it was dated from Torpoint, Devonport, 25th September 1849, and sent to him as a private communication. The facts contained in it so strongly corroborated the adoption of preventive measures in successfully treating the epidemic with which this country was then visited, that he thought it worthy of publication.

The manuscript was sent to you, accompanied, I believe, by a note from Dr. Milroy, explanatory of the circumstances under which it was written; but, it having been brought out in the *Medical Times* in the form of a paper, (and not as a letter,) without making the necessary verbal alterations required in such a case, the construction of the sentences was, in some instances, left open to criticism; to the truth of the statements, however, contained in that article, apparently so unpleasant to Mr. Chubb, I still adhere.

Mr. Chubb commences by saying, "that the picture is overdrawn, and more particularly with regard to the supply and quality of the water, on which so much stress is laid" by me. He then goes on to lead his readers to believe, that the inhabitants of Torpoint have never been at a loss for plenty of good and wholesome water since he came among them. How will Mr. Chubb reconcile this with the fact, that, for the space of a month from the 2nd of September, between thirty and forty tons of water were sent, three times a week, by Captain Nicolas, in one of the Victualling-yard lighters, for the use of his town. Why did not Mr. Chubb prevent so much unnecessary trouble and expense, if as he insinuates, it was not required? But that it was required, and that the people were grateful for the boon, is proved by a letter which was sent from the inhabitants to the gallant Captain, on the 13th of October, in which the following sentence occurs:—"And especially they return him their most grateful thanks for the most salutary and bountiful supply of water by him so frequently sent to them, which, under God's providence, *they believe materially assisted to check the ravages of the epidemic.* This letter was signed by about 200 persons, who evidently seem to have laid considerable "stress" on the benefit conferred; and that Mr. Chubb must have been of the same opinion at that time is evident from his name being fifth on the list. Surely, Sir, this document of itself fully bears me out in my statements with regard to the water.

Mr. Chubb asserts, that "all the precautions inculcated in my paper were in active operation long before he had the benefit of my assistance." Now, although I do not wish to cast the slightest reflection on Mr. Chubb's treatment, yet I deny this statement. He must recollect, that on the very evening I first went to Torpoint, I suggested the house-to-house visitation—a measure then almost in its infancy—and which, I well know, had not been previously in operation. Does Mr. Chubb forget, also, that the chloride of zinc was not used in Torpoint until I went there, to the efficacy of which, as a sanitary agent, he has borne public testimony in the following words:—"During the prevalence of the late outbreak of cholera in this district, I have had *ample and frequent* opportunities of judging of the value of this method of *lessening or checking the amount* of an epidemic disease, and I am very glad to be able to say of the fluid in question, (the chloride of zinc,) that it is most certainly the best of disinfectants of which I have had any experience, and, in *numerous instances*, its application has been highly useful;" and whatever good results may have followed from the supply of water already alluded to, Mr. Chubb must acknowledge, that it was introduced after my arrival. I could remind him of many other sanitary measures suggested by me; but, as I do not wish to trespass too much on your space, I shall refrain from doing so just now.

Mr. Chubb states, that "Mr. Bowden (the gentleman who accompanied me from the hospital) was recalled after a few days, as the epidemic had abated in virulence;" now Mr. Chubb must be aware that Mr. Bowden was recalled by an order from Captain Nicolas, because his services could no longer be dispensed with in the hospital, and not for the reason given in his letter. Was it, I would ask, also in consequence of the virulence of the epidemic having abated, that subsequent to Mr. Bowden's removal, and when I had been in Torpoint for seven days, to my own knowledge, he applied to the Board of Guardians for, and obtained the assistance of a dispenser, who remained with us for a fortnight afterwards? But Mr. Chubb further states that the "cholera had nearly spent itself on my arrival." If such had been the case, how could he have had, as he states, "ample and frequent opportunities of judging of the value of chloride of zinc in checking the disease," and by what means did he discover that, "in numerous instances its application had been highly useful?" or what grounds had the inhabitants of Torpoint for saying, that they believed the water sent them by Captain Nicolas "materially assisted to check the ravages of the epidemic?" I am afraid, also, that the account of the state of Torpoint which the deputation gave who waited on the Superintendent of the Royal Naval Hospital, when soliciting medical aid, would not coincide with that given by Mr. Chubb. I am well assured that they did not say that the cholera had nearly spent itself at that time; on the contrary, they made a most lamentable representation of the health of the town, and which, when I went to the place, I found to be too true; besides, out of the 87 cases of cholera which occurred at Torpoint, I was myself concerned in the treatment of 39; and when I further add, that during my residence there I had 253 patients suffering from diarrhœa under my care, I think you will be fully satisfied that the disease had not nearly spent itself on my arrival.

Another statement put forth by Mr. Chubb is, that "on the 2nd of September the deaths had diminished down to about one a day, having been previously five times that number." This, he says, "can be proved by reference to the Registrar's book." Now, if by the convenient expression "about one," he means *two*, he is quite correct, as there were exactly two deaths on the day in question; but I am afraid the Registrar's book will not bear him out in asserting that five deaths occurred in one day during any period of the epidemic. I have now before me a list of those who died from cholera in his town, prepared and attested by the Incumbent of the parish, by which it appears that the number of deaths never at any time exceeded *three* a day. So much for Mr. Chubb's statistical accuracy.

Mr. Chubb asserts, that he never relinquished his duties during the whole period of the epidemic, and seems highly indignant I should have hinted that he was ever indisposed. Now, when I said so, I did not for one moment imagine that he could be offended with one for so doing, as I mentioned, in the same sentence, that his attention to those suffering from the disease had been most praiseworthy; but I am certain he will not deny that he has frequently told me he was quite done up, and could not possibly have held out any longer had he not obtained the timely assistance afforded him by Captain Nicolas; many of his friends, also, were of the same opinion, and, if I mistake not, he was obliged, some time before I joined him, to leave the town in consequence of inability to attend to his duties, and I am pretty certain that the Board of Guardians were under the necessity of employing a medical gentleman from Devonport to look after the cholera patients during his absence.

Mr. Chubb thinks it ungenerous for one medical man to expose the deficiencies of another, even if by such means he could in any way advance himself; in reply to this I can only say, that my report is not calculated to cast the slightest discredit on Mr. Chubb or any of the gentlemen who assisted him. I have no doubt but that they brought all their professional knowledge to bear upon the cases that came under their notice, and did all in their power to relieve the sufferers; but, as I did not profess to relate what was done before I went to Torpoint, I could not be expected to enter into details of treatment and statistics with which I had no opportunity of becoming acquainted. Mr. Chubb also knows, that I had nothing to gain by my services, which were both voluntary and gratuitous. I think, therefore, the insinuation contained in the latter part of the quotation is out of place and uncalled for.

Since writing the above, I have read a letter in your Journal from Dr. Millar, the surgeon of the Plymouth Marines, in which he charges me with imputing "neglect of due precaution on the part of the medical officers, and of the officers in command of the division," during the late outbreak of the epidemic in the corps. The following is the passage in my Report, to which he refers:—"I was often astonished at the numbers (of marines) brought into the Naval Hospital in a state of collapse on the first outbreak of the epidemic; the patients were sometimes so much exhausted, &c., &c. Upon inquiry, however, it invariably turned out, that they had been suffering from diarrhœa for several days *before they thought it necessary to acquaint the surgeon* with the state of their health. What reflection this casts upon either the medical or commanding officers, I am at a loss to discover; but, if Dr. Millar still fancies such to be the case, all I can say is, that it was unintentional on my part, and I regret that I should, without being aware of the fact, have given him any cause for offence. In another part of his letter, however, he attacks the accuracy of my statement; he says, "As regards the men being brought into the Naval Hospital in a state of collapse at the beginning of the epidemic, I have to state that such was not generally the case, &c." Again, he states, "that some who ultimately died of cholera, actually did walk there, being at the time merely affected with diarrhœa, which, however, merged into cholera after admission." Now, Sir, I have before me some memoranda which I made during the prevalence of the epidemic, by which it appears, that of the 19 Marines who died in the hospital from cholera, 8 died on the day of admission 8 on the day following, 1 on the second, and 1 on the fifth day after admission, and only one case was admitted for diarrhœa, which terminated in cholera; this, I think, is surely *prima facie* evidence that I was correct; but, I am quite willing to be judged by, and solicit a reference to the public records of the hospital, as to whether I was right in stating, that the men were brought into that establishment on the first outbreak of the disease in a state of collapse.

I must apologise for trespassing so far on your valuable space. I am enabled to bring forth public documents to confirm the truth of my statements, and defy any person to show that they are incorrect.

I have the honour to be, Sir, your obedient servant,

A. McCLURE, A.M., Assistant-Surgeon R. N.

H.M.S. Indefatigable, Hamoaze, Devonport, 27th December, 1849.

WESTMINSTER MEDICAL SOCIETY.

[To the Editor of the Medical Times.]

SIR,—In a report of the Westminster Medical Society, given in your journal of last week, a little error has inadvertently crept in, which you will oblige me by correcting. I am stated to have said, in reference to the "arcus senilis," that "it is always found in connexion with a corresponding opacity of the crystalline lens and capsule." The remainder of the report is faultless, but in respect to the quotation above made, the error may be thus corrected:—I mentioned, that I had not as yet been able to discover, in numerous dissections of the eyes of aged people (in whom this senile zone existed, the appearance which Von Ammon has described and delineated, viz., an opacity of the anterior or posterior capsule of the lens, in the situation (whether above or below) which is occupied by the senile arc in the cornea. Since pointing out the structure of the arcus, at the Society, I have, from several additional dissections, found that when that appearance is present, it is almost invariably in connexion with a fatty degeneration of some other part or organ of the body. Thus, in one subject the recti muscles of the eye were similarly affected, and the liver was fatty; in another, the heart was to a great extent in the like condition; and in a third example, the same degeneracy had affected the kidneys. These are only a few instances of the concurrence of this condition. Contrasted with the above, I may mention, that in the eyes of a female aged 67 years, in which the arc was absent, there could not be found the least fatty degeneration of those structures which, in the cases just given, were observed to be so affected. With apologies for intruding upon your columns,

I am, Sir, yours obediently,

31A, Saville-row. EDWIN CANTON.

MEDICAL REFORM.

[To the Editor of the Medical Times.]

SIR,—Although I was an opponent of the exclusive policy of the Council of the College of Surgeons, in instituting the Order of Fellows, yet I cannot, at the present time, see the advantage of destroying that grade, as you appear to intimate would be desirable, in your remarks upon Mr. Bottomley's propositions in the last number of the *Medical Times*. With due respect for your judgment, I must differ from you on this point. By exacting a higher amount of scientific knowledge as a qualification for the Fellowship than is required for a member's diploma, there will necessarily be a larger number of well-educated surgeons in the Profession than at present, and the cause of scientific surgery will be greatly promoted. This Institution is now a fact, and to destroy it would be merely to overthrow an arrangement which, with all its faults, promises to be of great eventual utility. It would be better to endeavour to reform it, so as to do away with the injustice inflicted upon the members at its original institution. I quite agree with you in your subsequent remarks, and particularly that the election of the Fellows by the members would be a superfluity and an embarrassment in a practical measure, as it could have no effect in selecting for honour a highly distinguished member, who would, by this plan, merely form one of a group, or, in branding an unworthy one, who could only be known in the majority of instances to a few individuals. Why not give full powers to the Council to exclude from the Fellowship every individual who, upon sufficient cause shown, may be considered to have dishonoured his professional character? This would meet excep-

tional cases, and would create a power now sadly wanted in the Profession, as the humiliating conduct of many members of the College, in keeping shops, selling nostrums, and quacking in every kind of way, too painfully shows.

I am, Sir, your most obedient servant,
Marylebone, January 14, 1850. C. J. B.

DR. CORMACK'S HEN.

[To the Editor of the Medical Times.]

Sir,—Dr. Cormack, at a meeting of the Westminster Medical Society, exhibited two hen's eggs united at one end by a narrow neck. This specimen he considered to be unique.

A short time ago I had a similar curiosity, which appeared to be a large hen's egg divided into two parts by a narrow constriction or neck, about two lines in length, and pervious, each part containing a perfect yolk. The same hen had laid a fac simile to the above some time before. Such specimens, I am told, are not unusual in the country.

Your obedient Servant,
W. H. C.

Diss, January 14, 1850.

Sir,—In the Report of the "Westminster Medical Society," published in your *Times* of last Saturday, it is there stated, that Dr. Cormack exhibited a "hen's egg united like the Siamese Twins," and said, "that he believed the specimen to be unique."

Will you, therefore, allow me space to say, that a hen in this neighbourhood, a few weeks since, laid an egg of precisely the same description as that stated by Dr. Cormack.

I had fully intended to have had it hatched; but, unfortunately, the cook, very heedlessly, put it in a pudding, and there was an end to my physiological experiment. I am, Sir, yours obediently,
H. Hastings, M.D.

Stokenchurch, 14th Jan., 1850.

HEALTH OF LONDON DURING THE WEEK ENDING JAN. 12.

The Average of Deaths for ten previous years, corrected for increase of population, is 1260, the deaths having ranged in that week from 929 in 1844 to 1457 in 1848, at which latter period the mortality was much increased by influenza, then on the decline. The deaths in the present return are, therefore, less than the average, by 195. The mortality from small-pox, though it shows a tendency to increase, is still less than half the average. Scarlatina and hooping-cough also cause less than the usual number of deaths, only 11 having occurred last week from the former epidemic, though the corrected average is 37; in the corresponding week of last year the deaths from scarlatina rose to 63. From typhus, which ranged in the same week of ten previous years from 22 to 83, the deaths returned last week were 33, or rather less than the average; but the mortality from measles is at present rather above it. The only complaint which is now fatal to a considerable extent is bronchitis, from which 25 children under 15 years, 31 persons between 15 and 60, and 64 at 60 years and upwards, died in the week; its increasing fatality during the last three weeks, in which the weekly mean temperature has been successively 33°, 35°, and 30°, is marked by the numbers returned, namely, 78, 103, and in last week 120. Of the 1065 deaths, 303 were those of persons of 60 years old or upwards.

The deaths in the several hospitals of London occurred as follow:—

Kensington House Asylum	0	London	7
Lock	0	Portuguese Jews' Hospital	0
Consumption, Brompton	3	Lunatic Asylum, Bow ...	4
St. George...	6	Guy's	3
Grenadier Guards' Hospital	1	St. Thomas	7
Westminster	2	Bethlem	0
Charing-cross	2	Retreat Lunatic Asylum	1
Middlesex...	1	New County Lunatic Asylum	1
University College ...	0	Peckham House Lunatic Asylum	2
Small Pox	1	Camberwell House Lunatic Asylum	0
Fever Hospital	3	Dreadnought Ship ...	2
Invalid Asylum, Stoke Newington	0	Devonshire Ship... ...	0
German Hospital... ...	1	Unité Hospital Ship ...	13
King's College	3		
St. Luke	0		
City of London Lying-in	0		
St. Bartholomew... ...	6	Royal Hospital, Chelsea (South)	2
Miles' Lunatic Asylum...	3	Royal Hospital, Greenwich (East)	3
Warburton's Lunatic Asylum	0		

MORTALITY TABLE.

Deaths in the Week ending Saturday, Jan. 12, 1850.
(Metropolis.)

Causes of Death.	Total.	Average of Ten Weeks.
All Causes	1065	1155
Specified Causes	1056	1149
Zymotic (or Epidemic, Endemic, and Contagious) Diseases	185	223
Sporadic Diseases:		
Dropsy, Cancer and other Diseases of uncertain or variable seat	41	59
Tubercular Diseases	131	187
Diseases of the brain, Spinal Marrow, Nerves, and Senses	114	131
Diseases of the Heart and Blood-vessels	52	37
Diseases of the Lungs, and of the other Organs of Respiration	255	255
Diseases of the Stomach, Liver, and other Organs of Digestion	53	60
Diseases of the Kidneys, &c.	13	9
Childbirth, Diseases of the Uterus, &c.	9	10
Rheumatism, Diseases of the Bones, Joints &c.	9	8
Diseases of the Skin, Cellular Tissue, &c.	4	1
Malformations	3	2
Premature Birth and Debility	23	22
Atrophy	15	13
Age	69	80
Sudden	8	12
Violence, Privation, Cold, and Intemperance	22	23
Causes not Specified	9	5

The following is the number of Deaths occurring from some of the more important special causes:—

Apoplexy	37	Heart	51	Phthisis 140	
Bronchitis ...	120	Hooping-cough	28	Pneumonia ...	83
Cholera.....	...	Hydrocephalus	20	Scarlatina	11
Childbirth	6	Influenza	6	Small-pox	11
Convulsions...	26	Liver	11	Stomach	6
Diarrhœa	19	Lungs	10	Teething	5
Dropsy	16	Measles	36	Typhus	33
Erysipelas ...	16	Paralysis	28	Uterus	2

BIRTHS AND DEATHS.

	Births.	Deaths.	Births over Deaths.
Males	688	503	185
Females	681	562	119
Total.....	1369	1065	304

METEOROLOGY OF THE WEEK.

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Means
Electricity.*	Nothing.	P. and tension strong.	Nothing.	P. and tension strong.	P. and tension strong.	P. & tension variable.	Nothing.	
Rain in Inches.	0·00	0·00	0·00	0·00	0·00	0·00	0·00	SUM 0·00
Amount of Horizontal Movement of the Air.	Miles 130	24	52	46	33	50	40	SUM 375
General Direction of Wind.	P.M. N.	N.N.W.	N.	N.E.	N.E. and S.E.	E.S.E.	N.E.	N.
	A.M. N.E.	N.	W.S.W. & N.	N.	N.N.E.	S.E.	E.S.E.	
Difference between the Mean Temperature of the day and the same day on an average of 7 years.	4·8	5·5	5·2	3·7	4·6	6·5	7·1	5·3
	—	—	—	—	—	—	—	—
Ditto. Dew Point.	21·3	23·5	25·5	28·9	29·4	23·2	24·2	25·1
Mean of Thermometer. Dry.	31.0	30·1	30·3	31·8	31·0	29·2	28·7	30·3
Mean of Barometer.	29·416	29·875	30·210	30·042	29·738	29·660	29·807	29·821

* In this Column, A. stands for Active; N. for Negative; and P. for Positive.

MEDICAL NEWS.

Apothecaries' Hall.—Names of gentlemen who passed their examination in the science and practice of Medicine, and received certificates to practise, on Thursday, 10th January, 1850:—Walter Arthur, Liverpool; Henry Scholfield Johnson, Liverpool.

Army Appointments.—Assist.-Surg. Jenkin H. Llewelyn, from the 44th Foot, to be Assist.-Surg. to 7th Dragoon Guards, vice Thomson, who exchanges. Assist.-Surg. James Thomson, M.D., from the 7th Dragoon Guards, to the 44th Foot, vice Llewelyn, who exchanges. 54th Foot.—Staff-Surgeon of the 2nd class, George Murray Webster, M.D., to be Surgeon, vice Dawson, deceased. 67th Foot.—Surg. James Morison, from half-pay 20th Foot, to be Surg., vice Shells, deceased. Hospital Staff.—Staff Assist.-Surg. John French to be Staff-Surg. of the 2nd class, vice Webster, appointed to the 54th Foot.

Naval Appointments.—Charles J. S. Kevern, Surgeon, to the Gladiator.

Appointment.—On Thursday, the 3rd ult., John Topham, Esq., M.D. (Lond.), Licentiate of the Royal College of Physicians, formerly University Scholar in Surgery, and Physician to the South Staffordshire General Hospital, Wolverhampton, was appointed Consulting Physician to the Infirmary, Bridgnorth, Shropshire.

Obituary.—At Dublin, lately, Guy Acheson, Esq., late Surgeon, R.N.

Devon and Exeter Hospital.—The funds of this Institution have been increased by a donation of 50*l.* from the venerable Archdeacon Stevens, and a legacy of 200*l.* from the executors of the late Mrs. Anna Butman.

Halifax Union.—Medical Relief to the Poor.—We extract the following from a summary of orders, visits, and medicines supplied to Poor-law patients, in the Halifax district for the year 1849:—Population, 19,881; area, 990 acres; numbers of orders for medical attendance, from the Relieving Officer, 706; visits to the residences of patients, 1563; mixtures dispensed, 3863; pills, 12,325; powders, 1826; lotions, 179; liniments, 144; boxes of ointment, 160; plasters, 415; remuneration for the duty, and the supplies here recorded, 80*l.*, or 2*s.* 3*d.* per case. The Medical Officer (F. S. Garlick, Esq.) of the District writes:—"I may just observe that the Medical Officer who has discharged the duties, and dispensed the amount of medicines recorded above, in the treatment of every form of sickness and of every degree of severity, occurring amongst the poorest of the poor, must have had his attention closely occupied, and must have been an eye-witness of a large amount of destitution. From morning till night, and often all night long, the Medical Officer pursues his dangerous task—from one chamber of sickness and misery he passes on to another—he visits cellars, garrets, and hovels unfit for human beings—filthy, dark, damp, and pestilential, no matter at what personal risk; and in these wretched places he must exercise the skill and appliances of his art in the subjugation of the most formidable disease. Everything is against him, yet, under all circumstances, he must persevere. His mission is to preserve human life, and mitigate, as far as possible, human suffering. He is the poor sick man's last friend, his forlorn hope,—he stands between him and death,—it is his province by skill and kindness to endeavour to arrest the fatal blow. Such a man ought not to be pinched, cramped, and thwarted in the way he is—every facility should be afforded him, and every appliance placed within his reach. If such a man do not understand and thoroughly know the requirements of Medical Relief, then, I would humbly ask, who does? If those who have the direction and management of these matters had a more practical knowledge of the sufferings and hardships of the sick poor,—if they could see how they have to struggle in order to eke out an existence at all,—if they could transfer themselves by some mighty effort from their own comfortable hearths to the poor sick man's miserable abode,—they would often be more considerate than they are, and would be ready to acknowledge the manifold difficulties with which a Medical Officer has daily to contend. Unfortunately they will neither investigate themselves, nor will they give credit to those who do."

Supply of Water for Domestic Purposes.—The epidemic which has recently visited us, has given this subject a degree of importance which it did not previously possess. Most of our large towns are now tolerably well supplied with water; but many of our smaller towns are very defective in this

respect. It is well to urge the necessity of "being washed and made clean;" but such counsels are wholly unavailing, unless copious supplies of pure and wholesome water be provided at moderate charges. The methods by which water is at present supplied to towns may be comprehended in two classes:—1st. Where the source of the supply is sufficiently elevated to admit of its being discharged into the cisterns of the consumers by its own gravity. This is known as the "Gravitation System." 2nd. Where the water is obtained from streams or springs, situated *below* the level of the point of discharge, so that it becomes necessary to employ machinery to *raise* it to the required altitude. The first of these is unquestionably that which should be adopted, wherever it is practicable at a moderate cost. On this principle, that portion of Glasgow situated south of the river Clyde is supplied with water, and there is the prospect of its being extended to the other parts of that city. Greenock, Dundee, Dunfermline, Stirling, Kilmarnock, Paisley, Portsmouth, and Newcastle, are all supplied in the same way. But the gravitation principle has been carried out in great perfection in all its details, in Edinburgh. Of the six Companies which supply London, five obtain water from the river Thames, and some of its tributary streams on the same level,—an arrangement which requires the water to be pumped to the required altitude. The water supplied by the New River Company is brought into London by its own gravity. This is one of the oldest of the London Water Companies. At Perth and Aberdeen, and by one of the Glasgow Companies, steam-engines are employed for raising the water. In some cases, too, as at Philadelphia, and other places in America, the power required for working the forcing-pumps is derived from the river from which the supply of water is obtained. Where this can be accomplished, it is generally found—whether considered with reference to the first cost or the current expenditure—to be the most economical plan. Some towns, as Liverpool and New York, obtain part of their supplies from wells. At New York, the gravitation principle has recently been adopted on a scale of magnitude hitherto unknown, and has, in a great measure, superseded the use of wells. This new supply of water for the city of New York is brought from the River Croton, a tributary of the Hudson, and passes along the left bank of that river. It is conveyed nearly the whole distance of 40½ miles by an open aqueduct, which is lined throughout with masonry; it is about seven feet broad, and the water, in its usual state, is about two feet in depth. The fall on the whole course of this aqueduct is 47 feet, and the receiving reservoir at New York, from which the distributing pipes diverge, is about 115 feet above the level of the sea. There are several very interesting works connected with this undertaking, the chief of which seems to be the aqueduct over the Haarlem River, consisting of 15 arches, seven of these being 50, and eight of them 80 feet span! The height, from the foundation in the river to the top of the works, is about 150 feet. The expense of the whole works has been about 2,400,000*l.*, an enormous sum certainly, with relation to the present population of New York; but it is considered that the supply thereby secured is sufficient for one million of inhabitants. An exceedingly simple apparatus for raising water, where the required quantity is comparatively inconsiderable, is the Hydraulic Ram. It is self-acting, and its first cost is trifling. It will raise water nearly 300 feet; but it is essential that there be 10 or 12 feet of fall, and that the quantity of water in the stream from which the supply is taken should be about ten times that to be raised. This might be applied for raising water for small towns and villages, whose elevations, with reference to the sources from which the supply may be obtained, are such as to prevent the water reaching the cistern by gravitation, and where the use of engine-power would be too expensive. The cheapness and simplicity of the Hydraulic Ram are recommendations for its application in cases where the required supplies are inconsiderable, in comparison with the extent of the respective sources. It would be very important if the same principle could be carried out, by taking advantage of the rise and fall of tides as the moving power. By this means, an abundant supply of sea-water might in many places be made available, in this and many other coast towns, for sanitary purposes, and at little more than the cost of laying down the pipes. This would be a most important application of the principle. For instance, the rise and fall of the tide at Leith would be sufficient to raise sea-water, with ease, to any level below that of the base of the General Register-house. Where the rise and fall of the tide is much greater, as at Bristol and Liverpool, this principle could, of course, be more readily applied.—*From a Lecture by Mr. Grainger at the Edinburgh Society of Arts.*

INFLUENCE OF WARM CLIMATES ON THE SKIN.—The action of intense heat, exposure to the rays of the sun, are strong exciting causes, as I have frequently observed in Italy. A gentleman who accompanied me through Switzerland, in the autumn of 1847, was suddenly attacked by eczema of the hands in a severe form, while descending from the Great St. Bernard to the village of Aosta, in Italy. We slept at the convent, where we were anything but comfortable, owing to the intense cold; and the following morning we set out for the warmer climate beneath us, in company with three other gentlemen whom we met at the Hospice. In descending, we were soon made sensible of the change of temperature; and the scorching rays of the southern sun, after so great a transition, were not long of producing their effect. Four of the party were attacked by smart diarrhœa, and the gentleman who escaped this unpleasant "compagnon du voyage," had for his share a severe attack of eczema of the face and hands, the heat and smarting of which fully employed him during the remainder of the journey. This was the *eczema solare* of Willan. Eczema of the hands is frequently the result of constant handling metallic or other pulverulent substances. Thus it is often observed on the hands of sugar refiners; hence has arisen the popular term, "grocer's itch," by which it is commonly known.—*Dr. Burgess on Eruptions of the Face, Head, and Hands.*

TO CORRESPONDENTS.

"A Reader of Journals" is informed, that the impertinent paragraph to which he alludes did not escape our notice. It served as straws to show the wind, and marked how much the galled jade winced. Our correspondent may moreover find, that forbearance has its limits.

We this week commence a short series of very valuable papers on Pericarditis, by Dr. John Taylor, of Huddersfield. We trust that nothing will occur to prevent our continuing the publication every week until completed.

"Dr. Glück," who filled a high medical appointment during the late Hungarian war, has favoured us with some papers on its surgery. We propose to publish the first part as soon as possible, being assured they must be most acceptable to our readers.

"Hospital Statistics."—We beg to inform a Correspondent who addresses us on this subject, that when our papers on the Parisian Hospitals are completed, we propose to commence an account of the London Hospitals. The first of the series, on the Origin of Hospitals, is already in type.

We shall next week complete our series of papers on "Our Sanitary Laws." In the meantime, we will consider the proposal of our Correspondent, to reprint them in a separate form.

"Mr. Renton's" letter has been received. Should occasion require, we shall be willing to investigate the subject to which it refers.

"M.R.C.S."—We are sorry to differ in opinion. We will, however, consider the matter. Perhaps our Correspondent will further favour us on the subject.

The Society for the Protection of Young Females has our best wishes; and we are happy to find the Directors have issued a monthly Paper on their behalf.

"Juvenis, of Wednesbury."—The best Manual of Materia Medica and Pharmacy is that of Dr. Royle, published by Churchill.

Our Islington Correspondent must excuse us if we say, that we have no great faith in the surgeons of special complaints. He should apply to any surgeon of repute; perhaps preferably to a junior in a case requiring great care and attention.

"Dr. Neligan" is informed we shall be most happy to reciprocate his kindness. We are unwilling to poach on his manor, but our Irish correspondence is really so voluminous from all parts of the island, that a *lapsus* such as he speaks of is not impossible. We will take an early opportunity to remedy it.

"J. B., Cirencester."—"Spedalskhed" is the name of a disease lately noticed for the first time, occurring in Denmark, Sweden, and especially in Norway: a specific skin affection, consisting of a thickening of the corium, which, in the ulcerative stages, gives out an ichorous discharge forming crusts not unlike rupia; in its more formidable shape, extending, we believe, to the mouth, hard and soft palates, to the nares, destroying the septum, and even larynx, and showing itself in a peculiar manner in the eye-lash and eye, totally destroying the latter organ. It has been rarely seen out of Scandinavia. It seems not to differ much, however, from the Elephantiasis known at one time in Egypt.

"Ja Wöhl, Belfast," is thanked. We shall be always happy to hear of the progress of the Colleges in the west, that of the "Irish Athens,"—we believe that is the proper phrase,—more particularly. For certain opponents of the Colleges, we would recommend some of the pains and penalties our Correspondent doubtless recollects in the Universities along the Rhine. Our contemporary, the "Dublin Evening Post," might suggest something "more Irish," &c.

"N., Boulogne."—The "hemispherical ganglia" are not what stated, but the true cerebral part of the nervous system; they do not, of course, include the corpora striata, thalami, or corpora quadrigemina, but are connected with them.

"Assistant-Surgeon, Chatham."—Sumbul is the name of one of the innumerable things put forward as a specific for Cholera. It is well known on the continent. It is a root not unlike colombo, with a musk-like odour. It has been tried lately at King's College Hospital, we believe, for epilepsy.

"M., Bath."—Of course, ant. tart. and tra. aurantii are incompatible.

"Dr. F. Churchill's Work on the Diseases of Children."—We beg to assure Dr. F. Churchill, that our remarks on volunteer reviews, in our last Number, had no reference to him. It is true, we received, not Dr. Churchill's book, but *two* reviews of it, one from a talented and much-respected Correspondent in Dublin, the other from a gentleman in London. We never for a moment supposed Dr. Churchill to have forwarded either. We are quite aware that there are authors who do not hesitate to review their own publications; and also editors who prostitute their columns to such meretricious doings. It is a subject upon which we are peculiarly jealous; but we again assure Dr. Churchill that our notice to Correspondents did not bear the slightest reference to him.

"A Constant Reader, Hungerford."—Boiled bacon consists of about seven eighths of fat, the remaining eighth albumen and fibrin. For ordinary mutton and beef the above proportions might be reversed—one-eighth fat, seven-eighths albumen and fibrin. It is probable that, though all these are nutritious agents in the strictest sense, yet that the two latter principles are more universally so, and are, therefore, more important and nutritious.

"The Son of an Old Subscriber."—It is well understood that there is a *prestige* in favour of a physician's diploma in the services referred to; but the precise nature or amount of influence which its possession exerts upon promotion is unknown. For the pay, &c., we refer him to the regulations.

"M.D. London, M.R.C.S.," speaking in reference to Professor Jamieson's proposal that a year at King's College should be recognised as an *annus medicus* at Edinburgh, says:—"Do the Students at Aberdeen go to Edinburgh to graduate?—and if so, for what reason, when they have an opportunity of doing so at home? It must be for one of two reasons: either the degree at Aberdeen must be held in low estimation by them, and to further their prospects in life they must go to Edinburgh; or the Examination is so difficult, that they find it easier to graduate at Edinburgh, as Irish Students find it less trouble to pass the English College of Surgeons than their own. If they do prefer graduating at Edinburgh for the first reason, then they hold the degree at Aberdeen less in value than we do here, for we prefer it to Edinburgh; if, on the other hand, (which I consider, from what I have heard, the most probable,) it is for the last reason—then, I should say, let them go, and let them bear the shame of the act."

[Our Correspondent says, "it is the man that makes the University, and not the University the man." We advise him to apply this test to the University of Edinburgh, and compare her roll of graduates, from the middle of the last century, with the list of distinguished medical men throughout the empire, not excepting the most eminent men of the present day, and he will perhaps discover why it is still held a distinction to possess the Edinburgh Degree.]

"An Uninitiated."—We desire we may not be troubled with such nonsense. Let our Correspondent apply to the nearest Member of the College of Surgeons, and he will obtain all he desires.

Our French correspondence arrived too late for insertion.

Our Engraver has, unfortunately, been unable to finish in time the sketch illustrating Mr. Chard's case of Congenital Malposition of the Viscera. The Article, therefore, is postponed till next week.

"Dr. Fearon's" communication is in type.

ORIGINAL LECTURES.

HUNTERIAN LECTURES

ON THE

GENERATION AND DEVELOPMENT OF THE INVERTEBRATED ANIMALS.

By RICHARD OWEN, F.R.S.,

Hunterian Professor and Curator of Museum of Royal College of Surgeons, Corresponding Member of the Institute of France, &c.

[Reported expressly for the "Medical Times," and revised by the Lecturer.]

LECTURE XV.(a)

GENERATION OF INSECTS. — Business of generation in Hexapod or "True" Insects committed to four kinds of individuals, — Males, Females, Neuters or nursing-females, and procreant virgin larvæ. Division of the class according to generation-characters into Ametabola, Hemimetabola, and Metabola. — General structure of the male organs. Chief modifications exemplified in species of Aptera, Hemiptera, Orthoptera, Diptera, Lepidoptera, Hymenoptera, Strepsiptera, Neuroptera, and Coleoptera. Analogy of the organs in their numerous and various forms and occasional bright colours to flowers. Monogamy or Polygamy in Insects governed by the structure of the intromittent organ. External outlets of sperm-ducts remote from that of the vesiculæ seminales and from the penis in the Dragonfly.—General characters of the female organs: exceptional simplicity of those of the procreant larval Strepsiptera and Aphides. Chief modifications of the female organs illustrated by parallel instances to those of the males. Modifications of the vulva, and its appendages the ovipositor and sting. Various uses and applications of the colleterial secretion. External sexual characters. Abnormal Hermaphroditism.

MR. PRESIDENT AND GENTLEMEN,—In the generative organs of insects, as in those of plants, Nature seems to have been prodigal in her power of producing endless varieties of forms out of one common type of organ, and subservient all the while to one common end or office; and the analogy to the reproductive flower is the more striking, from the brilliant colours which the essential parts of generation assume in some species of insect. But all insects are dicœcious; the individuals are of distinct sex. And there are not only "males" and "females;" but, in certain families of true or hexapod insects, there are other kinds of individuals, which are essential to the successful propagation of the species. In the social families of Bees and Ants, for example, there is a third form or condition of the individual, commonly called "neuter," and sometimes labourer or nurse. But, these are essentially female; having the female organs but imperfectly developed and passive. The working bee, at least, exercises the function of only one part of those organs, an accessory part, which is metamorphosed into a special poison organ, but which is the homologue of the ovipositor in fertile female insects. This working bee, or "non-breeder," as Hunter called her, relieves the parturient queen of her ova, places them in the appropriate nest-cell, and feeds the larva when it is hatched: it thus acts the part of midwife as well as nurse, and is an indispensable adjunct to the multiplication of the species. There is, again, in insects, a fourth modification of the individual, in relation to the sexual function. I allude to that remarkable state of the *Aphis*, which, like the working bee, is an arrested stage of the female, constituting the larviparous individual, which propagates by a kind of internal gemmation, without sexual concourse in her own person. She possesses, however, the female organs; but, contrariwise to the working bee, it is the external and accessory parts of the apparatus that are wanting, whilst the more essential organs are extremely active. Thus, at the outset of our survey of the generative system and function in hexapod insects, we encounter four different kinds of individuals in relation to that function:—males, nubile females, sterile females, and procreant virgins.

Certain modifications of the generative functions have served as a basis for the classification of the hexapod insects, some of which, as *e. g. aptera*, are said to undergo no metamorphosis, and have been called "ametabola." Others, as *e. g.*, the *hemiptera* and *orthoptera*, are described in entomological treatises as undergoing only a partial metamorphosis, and are called, "hemimetabola." The metamorphosis being more patent and conspicuous in the rest of the class, is admitted, said to be perfect or complete, and made the characteristic of the "metabola." The divisions so founded and defined are insufficient, however, for the generalisations of the comparative anatomist, and, by that very defect, are evidently less natural than the orders in the Linnæan system, from the characters of the wings, which I have here adopted.

I proceed now to demonstrate the structure and modifications of the organs or instruments subservient to the retention, nourishment, and transmission of the sperm-cells and germ-cells, and their products or developments; and, first, of the parts called the "male organs." In entering upon a review of the structure of the male organs of insects generally, we found their simplest type in the lowest organised members of the class, viz., the chylognathic myriapoda. The testes and their ducts, with short and simple intromittent organs, alone existed; there were no accessory glands, no mechanical adjuncts in relation to the coitus. The sexual apertures, on the seventh primary segment, though near the anal end of the body in the nine-jointed larva, become advanced much nearer the head in the fully devoloped iulus, by reason of the vast superaddition of joints, through the successive sextuple gemmation of segments between the penultimate and antepenultimate primary segments of the larva. In the chilopoda, the ordinary insect-type of the generative apparatus was more nearly approached, by not only the more definite boundary between testis and vas deferens, but by the termination of the sperm-ducts at the anal segment, and, likewise, by the presence of accessory glandular organs.

Testes, with distinct sperm-ducts, and superadded glands are present in all hexapod insects; and in all, with a few exceptions, the sperm-ducts open at the base of an intromittent organ, developed from the anal segment.

The testes are remarkable for the endless diversity of their forms, and often for the bright or brilliant-coloured pigment which besets the *tunica vaginalis;* in both characters reminding us of the flowers of plants. They appear to form a single organ in most Lepidoptera, but are actually two confluent testes, and were originally distinct in the larva of all that beautiful order.

In most insects the testes form a distinct pair of glands; but their cœcal structure, and the gradational development of the secerning follicles at length produces a seeming multiplication of testes, and it is difficult to avoid giving this definition to the six clusters of spermatic cœca, with their six ducts, on each side in the dung-beetle, *Scarabæus*, or to the twelve flattened circular glands, with as many ducts, which represent the testis on each side in the rose-beetle, *Cetonia*.

In all these cases, however, the ducts from the divisions or distinct lobes of the testis rapidly unite to form the beginning of a single *vas deferens* on each side; and the essentially parial character of the testes is manifested by the pair of *vasa deferentia*, whether the character be masked in the gland itself by confluence, as in the butterflies, or by multifid division, as in the beetles.

In the *Aptera*, Treviranus has given a good description and figure of the male organs of the *Lepisma*. The testes are represented by four or five elliptical glands, the slender ducts of which soon communicate with a common *vas deferens*, which, after a long fold, descends and dilates into a sperm-reservoir on each side. The accessory prostatic glands are bent upon themselves, like a common magnet; one end of each opens into the *ductus ejaculatorius*.

In the order *Diptera* the testes always present themselves as two simple glands, the outer capsule of which is of a brown or yellow colour; in the *Asilus*, when this outer coat is removed, the surface of the testis is nodulated by the prominent ends of the component cœca; two slender sperm-ducts terminate in a small sperm receptacle, which also receives two long filamentary prostatic glands; a long *ductus communis* is then continued to the base of a trifid penis.

In many of the *Lepidoptera*, the testis is clothed with bright pigment, crimson in the common white butterfly (*Pontia Brassicæ*), and green in the Sphinx. In most of the species the two glands approximate, and become confluent in the progress of the metamorphosis; but in certain moths, as, *e.g.*, the *Tinea*, the originally distinct condition of the testes is retained in the imago state; the testes also remain distinct in the Yponomeuta. In most *Lepidoptera* the *vasa deferentia*, or sperm-ducts, after a short course, receive two capillary prostates, and then a long and convoluted *ductus ejaculatorius*. What is remarkable in some butterflies (*Pontia, e. g.),* is not only the great length of the prostatic gland, but also the extreme length and winding convolutions of the common terminal duct. The structure of the intromittent organ in the Lepidoptera is such as to preclude the repetition of the act, and they consequently live in a state of compulsory monogamy. The bifid hooks on the terminal segment of the dorsal valve of the penis, whilst they serve to retain the female, prevent the extrication of the virile organ in a state fit for repetition of the act.

With respect to the order *Hymenoptera*, Hunter has left some good dissections of the male organs in the bee. We observe here, (showing the preparation,) that the testes are of a simple oblong form; but, when we dissect away the capsule or "tunica albuginea," we expose many long cœcal tubes, which, as they uncoil and float in the liquid, give a bushy character to the gland. The sperm-duct rises from near the middle of each testes, and soon swells into a large cellular reservoir common to it, with the openings of two pyriform prostatic glands, whence a common ductus ejaculatorius is continued to the base of the intromittent organ. Mr. Newport has given a good description and figures of the male organs in a wild bee (*Athalia centifolia,*) in which we have the same characteristics; the testes are two in number, but lobulated; the sperm-ducts are expanded, but are convoluted into a kind of epididymis, answering to the reservoir in the hive-bee; from this part the duct extends to the neck of the prostatic sac, which repeats the bent form. The short ductus ejaculatorius terminates at the base of a virile organ, covered by two pointed plates, beset with soft hairs. Above these are two other irregular, double-jointed plates, folded somewhat fanwise, and furnished with horny hooks. Between these are two muscular parts, which immediately enclose the intromittent organ.

As an illustration of the male apparatus in the order *Hemiptera*, I shall select the *aphides*. The male insect is winged, and is commonly smaller than the winged female. The internal organs of the male consist of six oval testes, two larger and four smaller, so closely impacted together as to resemble a single sexlocular organ. The two gently convoluted sperm-ducts proceed close together from the testes and open externally, in common with the ducts of two long, colourless cœcal appendages, upon a soft, unarmed penis. These appendages never contain spermatozoa; they are a simple form of accessory prostate. The spermatozoa are found in various degrees of development in the testes; when fully developed, they form oval bundles of very fine filaments, which separate in water, at one end expanding like a bunch of flowers. The intromittent organ is not broken away *in coitu*, and the male aphis may, therefore, enjoy a frequent repetition of the act.

In the order *Orthoptera*, we find the locusts with testes composed of numerous blind tubes, in most species enclosed in a common capsule. The prostatic glands also consist of fasciculi of tubes, and re-

(a) The 14th lecture, in our Number of November 24th, 1849, was, by mistake, printed as being the 13th, which appeared in the Number for November 10th.

mind us of the condition of the prostate in some rodentia.

The order *Coleoptera* offers the greatest diversity in the form and structure of the male organs. In the *dytiscus*, each testis is a filiform tube, much longer than the abdomen, but convoluted into a round ball. In the *hydrophilus*, the gland is represented by a series of short blind processes given off from one side of a common sperm-duct. In the *buprestis* a fasciculus of longer cœcal tubes radiate from the end of the sperm-duct. Sometimes the extremities of similar radiating tubes are dilated into sacculated flattened glands, as in the rose-beetle, (*cetonia*,) and numerous more composite forms have been detected; all, however, are referrible to modifications of the primitive blind secerning sac. Their analogy to the sexual parts of plants has already been alluded to, and entomologists have found it requisite or advantageous to borrow the neat and descriptive terms, with which Linnæus has enriched botanical science, in order to indicate the diversified forms of the male apparatus in the subjects of their favourite class. The intromittent organ is a long horny tube; usually retracted within the abdomen, but not capable of retraction after complete intromission, which usually terminates by rupture of the organ. Hence the *coleoptera*, like the *lepidoptera*, are monogamous. The terminal portion of the ejaculatory duct is continued into the penis, and, in the *carabus clathratus*, opens upon the centre of a soft glandiform termination of the intromittent organ.

Much unity of plan may be traced throughout the varied modifications of this organ in insects. In general terms, the intromittent organ may be defined as a modification of the last, or two last, segments of the abdomen. It consists of a large exterior sheath and a delicate membranous tube; the sheath commonly consists of two lateral valves. It is usually retracted out of sight. Accessory prehensile organs are developed in some insects, of which the most remarkable are those which are attached to the base of the abdomen in the male Libellula. In this remarkable insect, the sperm-ducts terminate, as usual, on the anal segment; but the vesicula seminalis is situated at the base of the abdomen. The semen is transferred thither by a strong inflection of the caudal end of the abdomen, prior to the coitus, and passes from the sperm reservoir into the vulva of the female, which is retained in contact with the basal joint by the claspers attached to that part.

The spermatozoa in all hexapod insects are filiform, and often remarkable for their extreme length; the anterior extremity is usually thickened for a considerable extent.

The sperm-cells usually contain many "spermatoa," or vesicles of development; these spermatoa are at first transparent, then granular, and lastly, the spermatozoon is developed, one in each. This makes the spermatoon change its form. It is stretched by the uncoiling of the spermatozoon, and at last bursts and allows the spermatozoon to escape. Thus let free in the common sperm-cell, they groupe themselves into regular bundles. Sometimes these fasciculi resolve themselves, and the spermatozoa disperse as soon as the sperm-cell gives way; but usually a part of sperm-cell remains as a partial sheath to the bundle, and when the spermatozoa remain in this way closely packed together the whole bundle might be taken for a gigantic spermatozoon. The bundle is very long, and appears convoluted in a knot in staphylinus, but is resolvable into its constituent spermatozoa, which become separated as they advance along the sperm-duct.

But here frequently, by the addition of the prostatic secretion, they are again collected into fresh bundles, and packed up into "spermatophora." These secondary aggregates present an elegant arrangent in the *Locustinæ*, being delicately barbed like a feather, and the spermatophora, with their fertilizing contents are finally conveyed *in coitu* to the proper "vesicula seminalis," or "spermatheca," which, as a general rule in hexapod insects, belongs to the female.

As a general rule, the life of an insect soon ends after the great act of impregnation has been fulfilled. The change of form prior to the acquisition of the procreating power is usually extreme, and rapidly undergone; the ordinary every-day life of the insect, spent in acquiring and consuming its daily food, forms a far larger proportion of its existence, and is passed under a very different and a very inferior form; which, if, in comparison to the last stage, we should regard as the more typical form of the animal, we shall not probably err. The cock-chaffer passes three years as a subterranean worm, but lives hardly as many months in its winged state. An ordinary observer sees and knows the May-fly only in that last joyous stage of its existence, and deems its life concentrated in one winged nuptial holiday; but, this so-called *Ephemera* has previously passed three hundred and more working days as an aquatic larva.

In no class of animals are the parts of generation so complex as in insects. The female sexual organs consist of the ovaries, the oviducts, the uterus, the spermatheca, the bursa copulatrix, the mucous glands, or colleteria, the scent-glands, and vagina; but, these are not all present in all insects. The external organs are the vulva, the sting, the holders, and ovipositor, some of which are likewise peculiar to particular species.

The most constant and essential parts of generation of the female insect, viz., the ovaria, are subject to almost as many varieties as the testes in the male; their forms may be arranged into almost as many genera and species, which are very often analogous to those of the essential glands in the opposite sex. The ovaria in the Lepidoptera do not, however, coalesce into a single mass, like the testes in the male; they are either digitate or verticillate; that is to say, they consist of a few egg-tubes suspended to the end of the oviduct, becoming attenuated as they recede from it; or they consist of numerous very long egg-tubes, proceeding from a short oviduct, and terminating in filiform extremities; they are usually disposed in spiral coils bending at the two sides in opposite directions, as in the *Noctua Brassicæ*. In the forest-fly each ovarium consists of two egg-tubes; in the flesh-fly it consists of a single tube, which is of great length, and twisted spirally. In the mantis a single series of short egg-tubes are attached to one side of a common duct. In the gnats, crickets, and locusts, the numerous egg-tubes, which are somewhat compressed, lie upon one another like scales, or the tiles upon a roof. In the Ephemera and Stratiomys, the ovaries have the primitive form of simple elongated bags, in which the eggs are contained linked together by delicate filaments.

Swammerdam has given an accurate description, with excellent figures of the female organs of the louse, the discovery of which helped him to an excellent argument against the spontaneous generation of that parasite from the filth of the abject members of our species, which it commonly infests. Five egg-tubes converge and coalesce into a single short oviduct on each side; the two unite into a common tube, with which a pair of branched accessory follicles communicate. The vulva is surrounded by four mammillary eminences; the spermatheca and bursa copulatrix are wanting.

In most *Diptera* the ovaria consist of numerous short egg-tubes, each divided into three or four compartments or egg-cells: the egg-tubes are variously disposed, combined, and associated in the different species. The sperm reservoir is present; it is generally trifid, rarely bifid, as *e. g.* in this *Stomoxis* (showing the dissection) still more rarely simple, as in *Pulex*.

There is no *bursa copulatrix;* but beneath the sperm-reservoir, in the common fly, the vagina swells out into a cordiform cavity, which receives the impregnated ova, and in which they are developed in the larviparous genera, *e. g., Musca, Anthomyia, Sarcophaga, Sachina*, and *Dexia*.

In the great forest-fly (*Hippobosca*), the ovaria are each a small simple cœcum, opening into a short common oviduct, which swells out a little above the communication. A pair of small sperm-reservoirs next open into the oviduct, and afterwards the ducts of two ramified colleteria; the part answering to vagina, swells out below this into a uterus, in which the ova are developed, and the larva metamorphosed, in this pupiparous insect.

In the *Lepidoptera*, the ovaria consist of four pairs of egg-tubes, disposed as I have already described. The sperm-reservoir is pyriform, and generally provided with a long spiral *ductus seminalis*, in whose basis a sometimes simple, sometimes bifurcate glandular cœcum opens. The colleteria are situated below, and consist of a pair of convoluted cœca, swelling out into pyriform receptacles at the vagina, where they open by a common duct.

In some butterflies, two small branched glandular organs are superadded, called the "scent-glands;" they secrete the peculiar odorous particles that attract the males; and of which property the entomologist sometimes avails himself in catching the finest specimens of that sex.

The bursa copulatrix finally presents a remarkable development, being a capacious pyriform, sometimes hour-glass-shaped, reservoir, which is furnished with a peculiar intussusceptive canal opening outwardly beneath the vulva. This latter canal gives off, by the way, a narrow convoluted lateral canal, which opens into the vagina near the orifice of the spermatheca, and thus effects the communication between the copulative sac and that reservoir.

Experiment has proved the office of the spermatheca to be that which its name implies. By the application of the fluid contained in it to the eggs of an unimpregnated female, Hunter made them fruitful: he also found that the intromittent organ penetrated its canal,—an observation which has since been confirmed by Audouin, and other observers.

In the hymenoptera the ovaria present great diversity as to the number of the egg-tubes, which varies from 3 or 4 in the humble-bee, to 6 in the wasp, to 10 in *Pimpla*, up to more than 100 in the queen-bee. To the short canal of the sperm-reservoir there are always attached tubular and glandular appendages, which usually bifurcate, and open into the duct of the reservoir. There is no bursa copulatrix in the hymenoptera. The colleterium is metamorphosed into the poison-bag and glands, unless, indeed, we may view the appendages to the sperm-reservoir as homologues, and not merely as analogues, of the colleteria in other insects.

With regard to the hemipterous modifications of the female organs, I shall refer, as in the case of the male organs, to the *Aphis*.

The two kinds of fertile females of this remarkable genus present two modifications of the female organs.

The viviparous females have two ovaria, from each of these, four multilocular oviducts are continued. The vagina is devoid of all appendages. The eight oviducts are similar in size, and the embryo is contained in the lowest or hindmost chamber.

The oviparous females have, also, two ovaria with eight oviducts, divided into two chambers each. The oviducts are seen in the most different stages of development, so that usually not one of the eight resembles another. In the fullest developed tube, the last chamber is capacious, large, and oval; the upper one small and conical. In the undeveloped etate the whole tube forms only a simple pyriform swelling of the oviduct, from which the upper conical compartment is by degrees established. The lower chamber contains a finely granular mass, which is gradually transformed into an oval egg; the upper chamber is full of cells, containing smaller nucleated cells. If we regard these nucleated cells ars germ cells, we may conclude that more than eight eggs are laid. Near the outlet of the vagina are two short cœca with thick walls, which contain a colourless, oil-like mass. A little before these the spermatheca opens; it is a colourless pyriform appendix to the vagina, and is of so delicate a structure as to be readily overlooked when it is empty, but it is filled with the spermatozoa after the coitus. The spermatheca is not so crowded, as in many other insects, with the spermatozoa, and hence their marvellous vibratory and undulatory movements may be witnessed.

The ova are fertilized during their passage along the vagina by the spermatozoa, and are smeared with the viscous secretion of the "colleteria," called *glandes sébifiques* by Léon Dufour. From the different organization of the internal generative organs of the oviparous and viviparous female *Aphides*, it follows that the first cannot ever bring forth living young; and that when once this oviparous generation is produced, no external circumstances, *e. g.*, warmth, can convert the individuals of such generation into viviparous females.

The males are frequently seen *in coitu* with the oviparous females, and the embrace is so close, that when seized by his wings the female is raised along with him. The males seem to be much fewer in number than the oviparous females; yet Siebold detected in all that he examined spermatozoa in the spermatheca, and thence concludes that the Aphides are polygamous; to which the structure of the male organs offers no physical impediment, as in *Lepidoptera* and *Coleoptera*.

In the *Orthoptera*, the ovarian tubes are commonly numerous and multilocular. The sperm reservoir communicates with the vagina by a short neck in *Locusta*, and by a longer canal in *Acheta*. There is no "bursa copulatrix;" and the colleteria are likewise wanting in *Parficula*, *Phasma*, and the *Acridiidæ*, but they exist in the genus *Locusta*, and are complex and ramified in the cockroach, where they have to provide the materials for the complex egg-case.

The ovarium presents two types of structure in the *Coleoptera*, the flagelliform and the sacciform; in the former type, there may be either three or six egg-tubes in each ovarium, according to the species. The sacciform type is presented in the darkling beetles (*Meloe*), and the ovarium is remarkable for the imbricated arrangement of its countless egg-capsules. The sperm reservoir is claviform in *Scarabæus*, or is bent upon itself, with a long neck, communicating with the vagina, or with the copulative pouch. Usually a simple, sometimes a bifid (rarely a ramified) accessory mucous gland opens into the base of the sperm-reservoir. There are no true colleteria; and I may remark that these organs are likewise absent in the Neuropterous May-flies (*Ephemera*) and Dragon-flies (*Libellula*).

The vulva is a complex aperture in most insects, and is defended by an upper and two lateral valves or plates; it is usually accompanied by other modifications or appendages of the terminal segments for grasping the penis and for oviposition.

Certain social Hymenoptera, which, as John Hunter quaintly observes, "have property to defend," possess a peculiar poison apparatus, which is essentially a modification of these accessory parts of the female organs, which are the only parts that acquire a functional activity in the neuters of the bee and wasp. The poison is secreted by two long and slender ducts—the homologues of the "colleteria," which unite together and empty their secretion into an oblong bag, which discharges itself by a narrow duct between the valves of the sting. This is a long, slender, and sharp process, with a serrated edge, which generally prevents its retraction when thust into the skin; it is the homologue of the "ovipositor:" the protecting valves are modifications of the last abdominal segment.

The corresponding parts are variously modified in other insects to insure a proper deposition of the eggs. In some insects, as the *Locusta viridissima*, the bivalve ovipositor is longer than the body, and, by means of it, the ova are conveyed to the proper depth in the soil, the act of oviposition being precisely analogous to that of setting seeds in the earth. In the saw-flies, the main part of the ovipositor is long, slender, and serrated, like the sting in the bees. With this instrument the female saw-fly (*Tenthredo*) saws into the substance of leaves, and there insinuates her eggs. The Ichneumons have a similar apparatus, but extremely elongated and slender, by means of which they introduce their ova beneath the skin of other insects.

Insects, like crustaceans, are occasionally subject to one-sided or dimidiate hermaphroditism. Numerous instances of this kind are given by Ochsenheimer. In fourteen of the instances which he cites, the right side was male and the left female; in nine instances it was the reverse. Occasionally hermaphrodites are found, where the characters of one sex, instead of extending over one-half, are limited to particular parts of the body, which agrees in the main with the other sex. Thus an individual of the *Gastrophaga Quercus* has been observed, in which the body, the antennæ, and the left wings were those of the famale, the right wings those of the male. The external sexual characters are very striking and various in the class of insects, and readily lead to the detection of the hermaphroditical condition of the internal organs.

LECTURES
ON
CLINICAL MEDICINE.
DELIVERED AT UNIVERSITY COLLEGE HOSPITAL.

By E. A. PARKES, M.D., Lond.:
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LECTURE III.

Hypertrophy and Dilatation of the Left Ventricle—Mitral Regurgitation—Aortic Obstruction—Slight Aortic Regurgitation—Dilatation or Sacculation of Ascending Aorta.

GENTLEMEN,—I have another case of heart disease to bring before you to-day, which contrasts with the two examples we have previously considered.

Benjamin Pooley, aged 30; a policeman for three years, before that a labourer. A temperate man, who had always lived well; born of healthy parents; had been always exposed to weather. When sixteen years old had a very bad attack of rheumatic fever, which confined him to bed for eleven weeks; he suffered at the same time from palpitation. After this he got well, and had no rheumatism subsequently except an occasional twinge of pain in the shoulders and hips. Till four months before admission he considered his health good; he had never lost a day's work from illness; then an abscess formed, without obvious cause, in the right axilla, and was opened; it discharged a great deal, and made him feel weak. At this time he had a little palpitation, but no dyspnœa, no dysphagia; a slight cough, which he almost disregarded; no rheumatic symptoms of any kind during four weeks previous to admission. Four days before admission he had some shivering; his ancles became puffy, and he had an attack of hæmoptysis, or rather coughed up a great quantity of expectoration, which was deeply tinged with blood. He had had no nausea or vomiting, and, till within the last three or four weeks, had kept his appetite. He had never had headache, vertigo, or tinnitus aurium.

Such were the chief points about the previous history of this case, which by no means prepared me for the enormous cardiac disease discovered on examination.

I examined the patient on the day he was admitted. I found a strong stout man, 5ft. 8in. in height, with a rather brilliant florid complexion, a circumscribed flush on the cheeks, a bright sparkling eye, and red lips. The countenance did not in the least betray, what was, however, immediately evident, that the patient was labouring under great dyspnœa; in fact, he could not lie down, but rested in a semi-inclined position. He could, however, lie on either side, or on his back, provided the head and shoulders were raised. Although there was this inability to lie down, he was not breathing absolutely quicker than usual; the respirations were slightly irregular and deep, but on an average not above twenty per minute; expiration was longer than inspiration. The chest was broad and well-formed; the right clavicle was more prominent than the left; the right post-clavicular space deeper than the left; the tendon of the right sterno-cleido mastoid, manifestly more prominent than the left. There was decided, but very slight prominence of the cartilages of the first and second right ribs, and of the right upper edge of the sternum. There was decided, but slight general bulging to the left of the sternum, from the second interspace downwards. The heart's apex was beating at the seventh rib, exactly 4 inches below the vertical level of the nipple, and 1 inch outside a line prolonged vertically from nipple. The superior limit was at the upper edge of the third rib; the inner limit ¾ of an inch to the *right* of the sternum; the outer edge 2¼ inches outside left nipple. Vertico-diagonally the dulness measured 8 inches, laterally 7½; vertically, 5. Over the whole of this space there was pulsation, which was most marked at the apex, where, indeed, it was very strong, and under the third left rib, and second and third left interspaces. There was also dulness under the first bone of the sternum, and nearly equally on both sides of it; this dulness measured 3 inches laterally, and assumed a circular shape, contracted above and below. There was pulsation under the cartilages of first, second, and perhaps third right ribs, under cartilages of second and third left ribs, in post-sternal hollow, in subclavian arteries, in carotids, but not perceptibly under the first bone of sternum; there was also distension of both external jugular veins, without pulsation; the left jugular and the other large veins were especially distended and tortuous, so as to fill the triangular space. The heart's impulse was strong and heaving, and a little irregular. The radial pulse 120, just visible, rather thrilling, intermitting every eighth or tenth beat.

Auscultation gave us the following signs:—At the top of the sternum the heart's sounds were completely obscured by the respiration, which took place in the following way: there was a short, harsh, metallic inspiration, followed by a long, metallic, almost croupy expiration in four or five distinct puffs. Although the respirations did not average more than twenty per minute, the man was unable to hold his breath for a moment, but when he did hold it for a second or two, we heard the heart's sounds very rapid and irregular, but apparently without bruit. At the second right cartilage, there was a distinct systolic, and a more indistinct diastolic bruit; at the second left cartilage the same; the croupy expiration was less marked here. At mid-sternum there were both systolic and diastolic murmurs; the last indistinct. At the apex outside the nipple there was a loud, rasping, systolic bruit,—the second sound often inaudible; inside nipple a much softer systolic murmur; at times a little doubtful friction quite at apex; none elsewhere in cardiac region; decided impulse and systolic murmur were perceptible in the left interscapular region.

The state of the lungs was as follows:—All over the chest, more or less, was lengthened and divided harsh expiration; at both bases fine muco-crepitant rhonchi, without dulness, more marked on left side; on right also sibilant rhonchi, mixed with less muco-crepitant, and a distant and feeble respiratory murmur. The heart's sounds were heard over the whole of the back. Every now and then the man said that "wheezing came on," and then he coughed. He had no pain in the chest.

The hepatic dulness extended from the upper edge of the sixth rib to three finger-breadths below the false ribs.

The feet were not at all swollen; the superficial veins were not enlarged.

After four days' rest, with digitalis and opium, the following was his condition:—

The extreme dyspnœa had disappeared; the prolonged harsh expiration had almost gone; the great veins of the neck were hardly at all distended; the face was less flushed; the pulse had fallen to 92; the heart's action was less forcible; there was a systolic bruit under the first bone of sternum, and to the right and left of it; hardly, if any diastolic bruit; the diastolic bruit was hardly perceptible at second right cartilage, audible at midsternum; loud rasping systolic bruit at apex, maximum, both as to loudness and roughness outside nipple, where there was also a little thrill; the heart's action was a little irregular. The urine, which we had now examined, was scanty (℥xx.), slightly acid, sp. gr. 1024, without sediment, and without albumen. There was a little extremely fine muco-crepitation, or even crepitation, at the base of the left lung, but less coarse rhonchus than before.

There was more pulsation at the upper right edge of the sternum, under the bone, and in the neck. In the arteries of the neck there was a systolic murmur.

A few days later he had still further improved, and said he breathed as well as ever. The only material difference in the report was, that there certainly appeared to be something like a diastolic murmur at the extreme apex outside nipple, lost immediately above apex; urine same characters.

A few days later he had still more improved, but a cholera patient being brought into the next ward, he got alarmed, and quitted the Hospital, saying he should return to his work.

Three questions present themselves here for consideration. What was the state of this man's heart and other organs on admission? By what steps had the heart attained to that state? What were the points in which this case contrasted with the previous two cases?

1. As to the size of the heart. There was no doubt about the existence of enormous enlargement

of the heart, and chiefly of the left ventricle. As is usual, though not invariable in these cases, the heart had extended downwards and to the left, very little upwards. Now in the only other disease, or, at least, usual disease, which causes marked increase of præcordial dullness, viz., pericardial effusion, the increased dullness is upwards more than downwards. But the heart had extended more to the right than is usual in hypertrophy of the left ventricle. Was there, then, enlargement of the right ventricle, or was it merely displaced by an immense left ventricle? This is a difficult question, and we will defer its consideration for a few moments. We had no direct evidence about the auricles, but there was little doubt that the left auricle must be hypertrophied, on account of the existence of certain lesions of the orifices, and this conjecture was somewhat strengthened by the pulsation in the third left interspace, which was, no doubt, auricular. It was also probable, from the strong, heaving stroke of the heart, that the muscular substance was in good condition, *i. e.*, was not fatty.

2. As to the orifices. That the mitral orifice was patent was evident from the extremely loud, rasping systolic murmur which had its maximum at the left apex, and from the state of the lungs, which were evidently in that condition which, when consecutive to cardiac disease, seems to result only from two conditions, viz., from contraction of the mitral orifice with hypertrophied left auricle, or from patency of the mitral orifice with hypertrophied ventricle. In either of these cases the blood is thrown back through the pulmonary veins upon the lungs; then ensue congestion, pulmonary apoplexy, or capillary hæmorrhage into the bronchial tubes; and, as a consequence, more or less bronchitis. This state, in which the lung disease is secondary to the heart affection, is in most cases easily distinguished by many circumstances from the lung diseases, such as emphysema, which are primary to the heart affection. In addition to the mitral disease, we had evidently aortic obstructive, and very slight aortic regurgitant disease. I say very slight aortic regurgitation, because the murmur was feeble, yet not like the feeble, peculiar murmur of aortic valves, completely broken down, and because the beats of the arteries did not possess the thrilling moving character they exhibit in great aortic regurgitation. On the right side we had no positive evidence about the pulmonary valve, and therefore we concluded, according to the usual rule, that this orifice, the least liable to disease of any, was healthy. But now as to the tricuspid opening. Was there regurgitation through it? The systolic murmur at the apex was evidently chiefly or altogether owing to mitral regurgitation. That it was not attributable to tricuspid disease was probable, not only from the comparative rarity of tricuspid murmurs, but also from the fact that it was not louder at the apex of the right ventricle than it would have been, had it proceeded entirely from the mitral orifice. It was heard here, it is true, but then it was heard all over the chest; that it was heard here proved nothing for tricuspid regurgitation. Then, again, the jugular veins were distended. Was not this a sign of tricuspid regurgitation? Not in this case, for this reason,—the veins were distended, but they did not pulsate, and they did not fill from below. They appeared to be distended in a different manner than is usual in tricuspid regurgitation, as if from some cause pressing upon the venæ innominatæ, or even the superior cava. When the patient leaned forward the jugulars emptied, evidently from the removal of pressure; in tricuspid regurgitation they would still have filled, though not so well as in the recumbent position. And there did appear to be a compressing cause, as we shall presently notice,—a state of things impeding the free flow of blood into the right auricle. As these signs proved nothing for tricuspid regurgitation, so there was strong negative evidence against it; there was no general dropsy. Once there had been a little œdema of the feet, but this had passed off; there was not a sign of any impediment to the general circulation; therefore, most probably, the tricuspid valve was competent. But now, the competence of the tricuspid, coupled with the history of the case, lessened the probability of there being any great hypertrophy of the right ventricle. Probably there *was* some hypertrophy, as there must have been for some time an impediment in the pulmonary circulation, but the extent of such hypertrophy, although indeterminate, was, probably, not considerable.

3. As to the pericardium,—there was certainly no fluid. Were there any adhesions? Here, again, we had no evidence. There was a little intermission every now and then, but no great irregularity, and no inequality in the heart's action; the diagnosis of adhesion, always difficult when the case has not been traced up, was, in this case, unsupported by any positive evidence, and was, therefore, left undetermined. I fancied I heard a little circumscribed friction about the apex, and, at the last report, a curious diastolic sound was noted at the extreme apex, which may have been pericardial. If so, it might be owing to a patch of old rough lymph at the apex, a condition which will give rise to a sound of this kind. This would imply freedom of the rest of the membrane, as the apex is seldom free if the other parts are adherent. But the patient left the hospital before we had time fully to investigate this point.

4. As to the aorta. The dulness, on percussion, under the first bone of sternum and to the sides, the pulsation, and the slight but decided prominence, were evidence of dilatation at any rate. But was there more than this; was there sacculated aneurism? This is a most difficult question, as the presence of hypertrophy and of valvular disease complicated the case to an extreme degree. The pulsation was nearly, though not quite, equal at either side of the sternum; the systolic bruit was not louder, nor even more hollow, here than over the aortic valves; the diastolic, if heard, was not nearly so loud as over the valves; there was no heaving, and no thrill. There did not appear to me to be unequivocal evidence of anything beyond dilatation, unless the signs of pressure were to be considered so. After four days' rest, and when the heart's action had quieted, and the pulse had descended to 92, the pressure excited by the dilatation on the jugular veins ceased, and these emptied themselves. At the same time, the slight pressure on the trachea also ceased, and the short abrupt inspiration, the croupy, prolonged expiration disappeared. Let us leave, however, the consideration of the condition of the aorta till another occasion, as this is not one of the special points about the case to which I desire to direct your attention.

5. As to the lungs. There was bronchitis, and, probably, some amount of hæmorrhage. After entrance into hospital, the patient had no hæmoptysis and scarcely any expectoration, but that there was some hæmorrhage appeared to be probable from the fact, that when the congestion had lessened, and the muco-crepitant rhonchus had nearly disappeared, there was left an extremely fine, puffy crepitation, which was either pneumonic or from hæmorrhage; every other symptom pointed to the latter.

6. As to the liver. Its extreme height was four and a half inches, it was not at all tender, and though, as already said, it was below the false ribs, it was very little enlarged.

7. The spleen, kidneys, other abdominal organs and cerebral organs, presented no positive symptoms. The urine was tested five or six times and was always non-albuminous, and without deposit of lithates.

Such was the condition of this man; an enormous enlarged and hypertrophied left ventricle, a probably hypertrophied left auricle, a patent mitral, an obstructed and slightly patent aortic orifice, a dilated or aneurismal aorta, slightly pressing on the trachea and large veins; a probably enlarged right ventricle; the condition of the pericardium doubtful; the lungs suffering moderately from the regurgitant mitral disease; the liver comparatively or altogether unaffected; the other organs, also, so far as we could make out, sound.

What, now, was the sequence of events in this case? How came this heart into the state I have described? Fourteen years previously the patient had had rheumatic fever and cardiac palpitation. We may, therefore, assume, taking the progress of the case into consideration, that he had endocarditis, or pericarditis, or both. He recovered, and considered himself in perfect health for nearly fourteen years, although at the end of this time, when he begins to break down, an amount of disease is discovered which must have been gradually augmenting for many years. Now, here is a feature about this case which I wish you to note; a man labours for many years under a serious disease of the heart which causes him no discomfort, of which, in fact, he is unconscious. This, again, throws light on the course of events. But let me continue the hypothetical account of the case. I presume that this man suffered, fourteen years ago, from endocarditis of the left side, and probably of the aortic orifice chiefly. Thence ensued, after his recovery from the rheumatism, slow thickening of the aortic valvules, and coarctation of the aortic orifice; as slowly ensued upon this, its conservative and compensating condition, hypertrophy of the left ventricle. As the man was young and otherwise healthy, the muscular substance was firm, and there was no disposition to dilatation. Now, had the man been in an easy and non-laborious trade, he might have lived a number of years with this lesion without inconvenience; in fact, he did live for many years without any notable discomfort. Engaged, however, as he was, in athletic occupations, the hypertrophy went on increasing. At length the mitral valve, either from some disease which it had suffered during the endocarditis, or from the force of the strong ventricle breaking down its valves, or from its orifice increasing in circumference faster than the valvules in length and width, began to permit regurgitation. Then ensued the inevitable effects of regurgitation; the blood, thrown back on the auricle and the lungs, caused pulmonary congestion. But, this being slowly accomplished, was unperceived by the patient, one of a class who pay but little attention to personal sensations of any kind. Another evil was, however, gradually developing itself, viz., dilatation, or possibly sacculation of the aorta, and slight pressure on the trachea and large veins. Then the general health began to fail; the man began to get "nervous," as he told us; an abscess in the axilla, probably from a strain, but, nevertheless, to be considered as a sign of impaired health, formed. Finally, hæmoptysis came on; the man became too ill to do his duty, and entered the hospital. The only point which is not clear, is the cause of the disease of the aorta itself. But, aortic dilatation and sacculation are, as far as etiology is concerned, more obscure even than the cardiac affections. It is not of much use to inquire, with this single case before us, whether there had been any loss or elasticity of the aorta, any unusual yielding to the current of blood, forced on by this strong ventricle, after the aortic valves had been a little broken down, or, whether any other causes may have been in operation?

Let us now contrast briefly this case with the two former.

1. In all three cases there was dyspnœa, or even orthopnœa, *i. e.*, the patients said they could not breathe, and could not lie down. But, how different from the last case were the two first. In them we had livid lips, and darkly-flushed faces; a sense of suffocation, which the deepest inspiration did not thoroughly relieve; a respiration frequently repeated, as if the patients responded constantly to that ever-recurring necessity for air. In the last case we had a respiration not quickened; when once the air had passed the obstacle, all sense of suffocation vanished; we had no livid lips and watery-staring eyes, but a bright scarlet flush of the cheeks, dependent on other causes than the dyspnœa. We had, in fact, a good instance of the difference between two of the three great varieties of breathlessness, viz., 1st. That in which from affection of the lungs, the blood *cannot* be properly aërated, even when air is freely admitted; and 2nd. That in which the blood at once *can* undergo its proper changes, if the obstacle which opposes the entrance of air can be momentarily relieved. In our present case the dyspnœa was evidently owing more to the pressure on the trachea than to the mitral regurgitation; for it had much lessened in a few days, and it was evident that the dilated aorta exerted less pressure, since the jugular veins emptied themselves easily, while, at this time, the force of the ventricle, though lessened, could not have been so much so as to cause this great difference, had the dyspnœa been owing chiefly to mitral regurgitation. The

difference in the kind of dyspnœa to which I have now alluded, viz., that in which the blood can be perfectly or only imperfectly aërated, is well worthy of consideration; often, at once, observing it, we may suspect aneurism or tumour commencing to press on the trachea. I have seen one case of either aortic or innominate aneurism, in which the respirations were only four per minute; the inspiration occupied four or five seconds; the man was quite relieved; that quantity of air sufficed for perfect aëration for the moment; then came on expiration, lasting fourteen to seventeen seconds, and then the shorter inspiration followed. It is, of course, understood, that this dyspnœa, with slow breathing, is not constant in aneurism or tumour pressure on the trachea, particularly in the advanced stages.

2. Another point of difference between these cases was, that in the two former there was dropsy; in the last none, or merely a little transient œdema. And the cause of the difference is very evident; for, in the first cases, we had impediment to the general circulation occurring from disease, especially of the right side of the tricuspid orifice, and the ventricle itself, and from primitive or superadded lung disease. But, in the last case, the general circulation remained free; the blood found its way into the right side, with only a trifling impediment, which was soon relieved; was propelled through the lungs, and then returning, without much difficulty, to the left side, was hurled by that immense ventricle forcibly through the system. But, if the patient does not die of pressure on the trachea, or from some other cause connected with the aorta, as most probably will be the case, he will die with dropsy; for, gradually, the lungs will be more and more congested by the mitral regurgitation—hæmoptysis will relieve this from time to time, until, at length, the right heart will begin to dilate and thicken, in order to overcome the obstacle in the lungs; then will ensue stagnation of the general venous system, from dilatation of the right side, or from tricuspid regurgitation, and dropsy will follow. Thus, we should have one of those complicated cases to which I referred at my last lecture.

3. Another difference between these cases was also very well marked, though not, perhaps, so well as it is sometimes; viz., that it is in tricuspid disease that the liver suffers especially; for its capillary circulation is affected no less directly by tricuspid regurgitation than that of the lungs is by mitral regurgitation with ventricular hypertrophy, or by mitral contraction with auricular hypertrophy.

Many other remarks might be made on these cases; but I am afraid of wearying you, and we shall have frequent opportunity of going over similar ground.

ORIGINAL CONTRIBUTIONS.

OBSERVATIONS ON THE RECENT EPIDEMIC CHOLERA.

By GEORGE ROSS, Esq.,
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TREATMENT.

Many curious phenomena in relation to the nervous system were observed among my patients labouring under cholera. One lady, who died in the consecutive stage, showed symptoms of catalepsy on the fourth day after her attack. On the following day, the cataleptic state of the muscles of the upper extremities was complete; but towards evening it disappeared. Obscuration of mind commenced with the catalepsy; torpor succeeded; but the lady did not die until five days afterwards. In another case, on the fourth day from the attack, at about six o'clock in the morning, the patient—a man—lost the sense of vision, of hearing, and taste for the period of half an hour. I was sent for, and saw him at seven o'clock, when, however, these faculties were restored. He now complained of a sensation of warmth, which had succeeded to *extreme cold*, but there was no coma or mental dulness. He died at three p.m. on the same day.

Being desirous of trying the saline plan recommended by my excellent friend Dr. Stevens, I employed it in all my first cases—not, however, alone, but generally aided by other remedies. I rarely administered other agents until I feared that the saline plan was incompetent to the cure. I was unable to administer the saline remedies in the form recommended by Dr. Stevens, in consequence of the predominance of common salt, which was offensive to the patients, and caused the remedy frequently to be set aside. I therefore devised the following formula, which may please the chemico-physiological practitioners, as it bears a close relation to the more recent views of the combination of the saline constituents of the blood.

℞ Sod. chlorid.; potas. nitr.; sod. phosph., aa. ʒiss.; potas. chlor., ʒss.; aq. puræ, ad Oiv. Mist. cyath. vin.; pro re nata sum.

This formula was constantly used throughout the whole period of the epidemic, when it was thought necessary to administer salines.

The greater number of my early cases died in the consecutive stage, and I was inclined to think that it was owing to the salts, which helped the patients over the collapse, but were unequal to accomplish a final cure. At this period, both during collapse and the re-action, the salines were employed abundantly; but, with the exception of the apparent advantage above stated, I could perceive no probable benefit from their use. It might have been expected that they would have excited the action of the kidneys, and removed the suppression of urine,—that most imperative indication during the latter stages; but they evinced no such power. Subsequently, I was induced to employ more active remedies, with the view of arresting the disease in its early stages, and, as I believed, with far more benefit. It appeared to me, that granting that the salines might carry the patient over the collapse, they certainly could not cure in the stage of re-action, and it was, therefore, necessary to employ remedies that, if possible, had a more restraining power over the collapse, as the subsequent re-action, under the saline plan, most frequently terminated in death. Other gentlemen have declared to a different experience; but that I cannot help, and desire not to account for. My object is merely to give the results of my own observation.

It has been suggested, that perhaps the employment of other remedies interfered with the action of the salines; but I do not think that any practical man will admit this plea. A moderate experience will enable a well-educated practitioner to distinguish the various effects of different remedies, and no one presumes to doubt, that, in most cases, the specific effects of calomel, digitalis, or iodine can be obtained and determined, though given in combination with other remedies. Of course I do not mean to assume, that if large quantities of brandy should be given that the effect to be expected from salines would not be frustrated; but when adjuvant remedies are administered in moderation, and with special indications, it cannot be admitted that they interfere with the ordinary physiological action of saline remedies. The converse argument is usually employed to cover a failure. Although, therefore, I did not continue to place confidence in the power of salines to arrest this terrible disease, I regularly employed the formula cited, until the latter weeks of the epidemic, when I doubted its efficacy. My object in administering salines was to convey salts to the blood; but I do not believe that the process of absorption can supply the blood with its lost principles, and bring it to its normal state, under the peculiar conditions of cholera, in a few hours or even days, and conceive that something is wanted of more rapid and decided action.

My general plan of treatment, therefore, was, to administer six grains of calomel and two of opium, on the first application of a patient labouring under sickness and diarrhœa, before the rice-water stage was confirmed. These remedies were followed up with chalk, kino, and laudanum, of which last, ten minims were given after each loose motion. Thus, it occasionally happened that five or six grains of opium were given within the first hour. If these remedies failed in arresting the diarrhœa, and the true rice-water purging, with prostration, set in, I was accustomed to administer one, two, or three grains of nitrate of silver, combined with a quarter or half a grain of opium every hour, according to circumstances. Although I have tried numerous astringent remedies, as I have heretofore stated in this Journal, I have found none to equal the nitrate of silver in its power of arresting the evacuations in cholera. It will rarely fail; and sometimes a single pill has the effect of staying the purging, relieving the cramps, and restoring warmth to the patient. If given during the stage of convalescence, it is apt to induce fever, which is generally, however, transient.

In consequence of this result, I refrained from administering it in some cases of cholera induced upon gastro-enteritis and the remittent fever of children. In one remarkable case of a child, the evacuations by vomiting and purging were most profuse and constant; but I dared not stay them by the nitrate of silver, as high fever was certain to issue. I therefore refrained from interfering directly with the evacuations, but placed leeches over the abdomen, and gave febrifuge remedies,—in short, treated my patient in accordance with the ordinary rules of art, and she recovered. Many other patients,—I might almost say the majority, during the last month,—who suffered from cholera, with this modification, were treated according to the same plan, and I desire to impress this upon the reader, as I wish to show that different modes of treatment must be adopted for this disease, under varying complications, and that he must bring his science to bear upon every case that comes before him. It matters little whether these cases are genuine cholera or not. They are so called and reported, as I know; and it, therefore, behoves us to be on our guard, and to discriminate between such cases and simple cholera; for by so doing only can we estimate the value of different systems of practice. Patients will die of collapse in such cases, as in uncomplicated cholera.

With these reservations, then, let me be understood to say, that I know of nothing that exercises such remarkable curative power over Asiatic cholera as the nitrate of silver. If another epidemic should unhappily visit us, I trust that it will be largely employed.

As an adjuvant, I recommended my patients to take *solid ice;* and certainly nothing is so grateful to them, or accomplishes so successfully the end intended—that of assuaging the intense thirst, and of calming the vomiting that is so very trying and constant. At first, I gave *effervescent* salines very largely, and they quieted the stomach in some cases, but in others they caused urgent vomiting; *cold water*, also, used liberally, produced the same undesirable result. In my *Lectures* on the Asiatic cholera, I suggested, that the vomiting was not probably a dangerous symptom; and even now I consider it far less dangerous than purging, for reasons that will readily occur to the reader; but I am fully persuaded, that if the case can be carried through without vomiting, it is better to adopt the plan, as it removes a most unpleasant symptom. Ice assuages the thirst more readily than anything else; and if taken immediately the sensation of vomiting is felt, it has a singular power in arresting it; on the contrary, cold water, or effervescing medicine, by distending the stomach in nearly all cases, only precipitates the vomiting.

Ice rubbed along the limbs will also abate the violence of the cramps; but I have employed it only in those cases where a liniment composed of equal parts of turpentine, oil, and laudanum did not avail. I have generally found this liniment, when rubbed in in large quantities, answer the purpose; but the ice is preferable.

Another remedial measure that I have generally employed, is, I consider, of the highest importance in the treatment of this disease: it is the administration of an injection, *per anum*, of strong beef tea, with forty minims of laudanum, twice or oftener a day. This injection calms the irritability of the bowels, especially in the consecutive stages, and nourishes the patient when food cannot be taken into the stomach—a most important object to attain, as I have no doubt that many patients have died of mere starvation. The advantage that patients gain from this injection cannot be over-estimated.

Calomel I have employed in some cases, both in one large, or in repeated small doses, but I cannot say that I have observed any beneficial effects from its use; at the same time I do not think that it has done any harm, and certainly would not dissuade any practitioner from employing it, only let him

have the prudence to administer other remedies of a more positive character, and more directly applicable to the urgent symptoms of the disease at the same time. The practice of pinning faith on a single remedy, and that remedy, too, employed in subordination to theoretical notions, cannot be too strongly condemned, as it cannot fail, in the end, to make our Profession the scoff of the reflecting public.

The stage of re-action is that which most especially demands the exertion of all the skill and knowledge the Medical attendant possesses to effect a cure. The waste of the system must be supplied, and the kidneys induced to action; but these are problems not easily solved. Salines in moderation should be persisted in, or if there be great irritability of the stomach ten grains of carbonate of soda, and one-twelfth of a grain of a salt of morphia every three or four hours will prove a very agreeable and useful formula. The beef-tea injections are indispensable.

To remove the suppression of the urine is a matter of greater difficulty. In all cases it would be well to pass a catheter to ascertain whether the bladder may not be over distended and paralyzed, for sometimes, on using this instrument, I have drawn off a large quantity of urine, although afterwards secretion was not continued. On one occasion, I injected the bladder in the hope of stimulating the kidneys, but without effect. I can recommend nothing with confidence that can be said to re-establish the renal function. Leeches and repeated blistering over the loins, diuretics of every kind, dry cupping, the vapour bath (by means of Moss's ingeniously contrived portable apparatus), calomel, and the voltaic pile, have been employed and failed.

The only remedial means that ever distinctly recovered this secretion, was wrapping up a patient, who had suffered under suppression for four days in a wet sheet, and covering him over with five or six blankets. This process was gone through about 4 or 5 p.m., and about 10 o'clock the patient passed half-a-pint of urine, and the function was continued in a healthy manner from that time. I should strongly advise the adoption of this plan in similar cases. The wet sheet also proves useful in the early stages of the disease and commencing collapse, but I should doubt if it were of any service in deep collapse, as I know of nothing that really is.

I have also given chloroform, and have found it suppress vomiting and purging in the onset, but as the same result can be effected by opium, I saw no sufficient reason to give a new remedy the preference. It will also allay the troublesome hiccough that supervenes during the re-action; but it can only be regarded as a subordinate remedy.

With respect to the employment of opium, I may observe, that full doses given at the commencement, in what is commonly called the premonitory stage of the disease, are highly beneficial, but small doses are of no value. When, however, the purging is of the rice-water character, and profuse, and collapse is setting in, opium, according to my experience, wholly fails, and, if given in large quantities, is highly injurious. Nothing will answer the end but nitrate of silver.

My plan in future would be—opium, the wet sheet, and vegetable astringents, in the first or premonitory stage.

Nitrate of silver in the rice-water stage and in that of collapse, with the steady exhibition of salines —solid ice and beef-tea injections.

In the stage of re-action, the continuance of the injections and the ice, the use of the wet sheet and the employment of the catheter, with such other local remedies as the case may seem to require.

If I am asked why I have not tabulated my cases, my answer is, that my faith is shaken in that system, because I have found it utterly impossible to draw the line between diarrhœa and cholera. I apprehend that nearly one-half of all cases of confirmed collapse will die under any treatment; but these cases are a very small minority of the cases that exhibit the veritable characteristic signs of cholera, and these again run so insensibly into the ordinary forms of the disease, that I conceive there is an ample range for error in arriving at a diagnosis; and thus only can I account for the prodigious incongruities in the statements that have already appeared. I shall not increase these embarrassments; perhaps if I had attended a smaller number of cases, and they had been collected under one roof, I might have been able to give more precise results, but situated as I was, with a wide district and a large number of patients, I was unable to note separate symptoms, in *every case*, with sufficient minuteness to form the basis of a tabular statement; and tables constructed from loose data, after-thoughts, and shrewd guesses, as I fear they too commonly are, could lead only to error.

HOSPITAL REPORTS.

LONDON HOSPITAL.

STRANGULATED INGUINAL HERNIA ON THE LEFT SIDE—OPERATION WITHOUT OPENING THE SAC.

John Merritt, a waterman, aged 64, who had been subject to rupture for some years; but, for the relief of which he had not always worn a truss, came into the London Hospital, under the care of Mr. Nathaniel Ward, with a large conical protrusion, which had come down eight or nine hours before his admission.

It had descended into the scrotum, was equal in size to the two fists, and, from the great distension of the integument over it, the penis was entirely concealed, a puckering of the skin only indicating its position.

The tumour was excessively tense and tender to the touch, and yielded no impulse on coughing, the latter being evident only in the course of the inguinal canal. On grasping its base, and gently compressing it from below upwards, the upward impulse was found to cease exactly in the situation of the outer ring.

The usual constitutional symptoms of strangulation existed. Attempts at reduction having been carefully made by a medical man prior to the patient's admission, and the symptoms being very urgent, it was deemed expedient to operate at once.

The patient having been placed under the influence of chloroform, a longitudinal incision, about an inch in length, was made over the situation of the outer ring, which, having been exposed, a blunt-pointed bistoury was passed under its upper pillar and the latter incised.

Uniform pressure being then made with both hands, on the body of the tumour, and its neck compressed with the fingers, the gut went back without any difficulty. The bowels acted in twenty-four hours after the operation; a common enema having been exhibited two hours previously.

The wound had healed in fourteen days; the patient expressed himself as never better in his life, and left the hospital shortly after.

Remarks.—The advantage of relieving the stricture, without opening the sac, was in this case well shown. Had it been opened, the difficulty of reducing the gut would, no doubt, have been considerable, in consequence, mainly, of the large quantity of intestine protruded, and the impossibility of employing uniform pressure for its reduction; It would have been necessary, on the contrary, to have passed the gut back, fold by fold, which proceeding might have caused, as occasionally occurs, a further descent of one or more folds; and thus a considerable time (to say nothing of the probable injurious effects from manipulation, and the exposure of the serous membrane) would have been taken up before the final return of the bowel to its natural position.

In the process of reduction, however, the sac not having been opened, these difficulties were entirely obviated, and the intestine was easily replaced, the facility of so doing being mainly attributable to the equable pressure exerted on it, through the medium of the strong elastic bag of peritoneum.

The exact seat of stricture was here also well shown by the method of diagnosis particularly alluded to by Mr. Luke, (a) who observes:—"The point of cessation of impulse on coughing, indicates the upper boundary of the stricture, and the point of cessation of impulse on compression of the hernia, indicates the lower boundary of the stricture, and consequently the boundaries are the limits of its extent;" the boundaries merging together, in this instance, at the outer ring.

(a) *Medical Gazette*, Vol. II., 1841, p. 863.

CONGENITAL INGUINAL (LABIAL) HERNIA.

Case 1.—A child, aged 7 weeks, was brought as an out-patient under Mr. Ward, with an elastic tumour in the region of the right labium, and which, from the account of the mother, had existed ever since its birth. The right labium had a peculiar appearance, being oval in form, broader above than below, the integument being tense and shining. It projected about half-an-inch beyond the level of the left, and on a superficial examination gave the idea of being in a state of hypertrophy.

On placing the hand on it, however, a distinct impulse was detected on the crying or coughing of the child, and the swelling could easily be passed back into the abdominal cavity, and the tip of the middle finger introduced into the outer ring; the swelling being, in fact, an oblique inguinal hernia, which had descended anteriorly and internally to Poupart's ligament. A truss was ordered, and the rupture thus easily retained within the abdomen.

Case 2.—This patient, also a female, aged 20 months, was brought to Mr. Critchett, having a tumour in the left inguinal region, which on examination presented much the same characters as the last, except that its circumference was more distinct. The period of existence of this hernia was somewhat doubtful, for, according to the statement of the mother, she had only noticed it a few days prior to her application, when she thought it had originated in a fall which the child had from a chair. No particular attention, however, was at the time drawn to the situation of the rupture.

It is more probable that it had existed from birth, but had escaped observation, for it only appears when the child cries or coughs, speedily returning to its natural position. A truss was also ordered for this case, in the hope, that, in the process of time, the parts may be restored to their normal condition.

LARGE HERNIAL PROTRUSION,

CONSISTING OF PART OF STOMACH AND THE LARGE AND SMALL INTESTINES.—PARTIAL DEFICIENCY OF ABDOMINAL WALLS.—MALFORMATION OF BLADDER.

On December the 28th, a child, aged fourteen hours, was brought to Mr. Ward, having a large and oval tumour protruding from the abdomen, in the mesial line between the umbilical opening and the pubis, there being, within these limits, a deficiency of the abdominal parietes. Its upper surface was of a deep red colour, smooth and firm to the fingers, and entering it immediately below the cord, which was to the left of the tumour, was a knuckle of intestine, about the size of a small orange, which, when the child cried, became distended with flatus, and had a distinct impulse communicated to it. The large tumour did not undergo any alteration in size, nor was there any similar impulse.

Overlapping it on the right side, was a finger-like mass, solid to the feel, and of a deeper colour.

On lifting up the tumour, its under surface was very irregular, having several small projections from it, which presented no definite character.

Immediately above the pubis, and attached by a small pedicle, was a triangular mass of a dark red colour, moist on its surface, and having no covering of skin, which, from its shape and appearance, much resembled an enlarged glans penis. On either side of this, about an inch down, and situated on the upper part of the thighs, were two small conical projections of skin.

No external organs of generation could be recognised, but, from the appearance of the two small folds mentioned, Mr. Ward inclined to the opinion that the child was a female, as the projections had some resemblance to the two labia.

The anus was imperforate, and no impulse when the child cried could be detected by pressing the finger in the perineum. There was also spina bifida opposite to about the third lumbar vertebra.

The child was small, its surface of a blueish aspect, and extremities warm. Intra-uterine existence about seven months. Since its birth the napkin had been wetted with a reddish discharge, which constantly oozed from the under side of the tumour.

The child had not been sick, but was slightly convulsed, and refused to take the breast; but in

the evening, after it was brought to the hospital, it vomited some dark-coloured matter, mixed with a great deal of phlegm; the convulsions increased, and the child died the following morning, 36 hours after its birth.

The mother was very poor, and has had four children, one still-born, the others living and strong. During her pregnancy, she lived badly, and worked hard, but had no sudden fright, or met with any accident.

Post-mortem.—On opening the abdomen, the stomach was found dragged downwards, and lying obliquely, its pyloric extremity forming the commencement of the upper part of the tumour: immediately below the pylorus, the intestine swept round towards the right side, and here it was very much enlarged, so as to form a considerable bag. The tumour was found to consist of the whole of the small and large intestines matted together, by a large quantity of effused lymph, which had also been thrown out on their surfaces, where it formed a layer of considerable thickness, so that it was impossible to say, whether or not, the tumour was covered with peritoneum. The finger-like projection at the upper part, proved to be a lobe of the liver, and a portion of the gall-bladder, much enlarged and elongated.

Both the kidneys were much larger than natural, and almost spherical; the right one was in its normal position, but the left was placed in the pelvis. On passing a fine probe down the ureters, it was found to pass on either side of one of the small projections, on the under surface of the tumour; this, on further examination, proved to represent the bladder, the anterior wall of which was deficient, so that the internal surface of the posterior was exposed. On searching in the lumbar region, two testicles were found, and, on tracing the gubernaculum testis downwards, it passed to the conical projections on the upper and anterior aspect of the thighs; thus rendering it evident, that these little masses represented the two halves of the scrotum, whilst it also clearly proved, that the child was a male and not a female, as was supposed during its life.

On making a section of the projection, which bore some resemblance to a glans penis, it was found to be the corpus spongiosum and corpora cavernosa penis in a state of arrested development.

The extremity of the large intestine could be traced internally where it terminated, deep in the pelvis, in a dilated cul de sac.

PROGRESS OF MEDICAL SCIENCE.

FRANCE.

(Paris Correspondence.)

HEALTH OF PARIS.

Violent extremes of heat or cold are put down, by all systematic writers, amongst the general causes of disease; but experience has long since demonstrated to us that excessive heat is a much more powerful agent for the production of maladies than severe cold. The cause of this difference appears to lie in the development of malarious emanations through heat, while cold, on the contrary, prevents exhalation from the earth's surface. However this may be, were cold a powerful cause of disease, we should have a bad account to give of the public health here just now, for the whole country is enveloped in a thick mantle of snow, and the temperature has fallen to eight degrees below the freezing point; yet the public health was never in a more favourable condition. People suffer from the cold, but do not die of it; rheumatic affections appear to be the only complaints which are at all prevalent.

PIORRY ON THE CAUSE OF INTERMITTENT FEVERS.

M. Piorry could not decently pass over the attack made on him by two of his colleagues relative to the presumed cause of intermittent fever. He took up the question, accordingly, at the last meeting of the Academy, and delivered a long discourse, in which he endeavoured to prove, 1st, that seven centimetres was the normal diameter of the spleen, and, 2nd, that engorgement of the organ is virtually the cause of the fever. But whatever interest such discussions may excite here, they cannot be of any benefit to the readers of the *Medical Times*, who look for something more practical.

USE OF LONG-CONTINUED BATHS AND IRRIGATIONS IN CASES OF MADNESS.

M. Brierre de Boismont has been long favourably known as one of the most scientific writers on the subject of mental derangement. He is the proprietor of one of the best private asylums in the neighbourhood of Paris, and to him the Profession owe many excellent observations, particularly of a statistical kind, connected with mania. The remedial means on which M. de Boismont places most reliance in cases of acute mania, is the use of prolonged baths, aided by cold irrigations. Here the fluid literally extinguishes the nervous excitement, just as it extinguishes fire; and few cases are found rebellious to its use. The cure, also, is obtained in a much shorter period than under any other system—an immense advantage in cases of mental derangement. Thus, M. de Boismont observes, that at Bedlam and St. Lukes' the greatest number of cures in a given number of cases is obtained about the fourth month, while, under his method, the treatment seldom requires to be continued beyond a week. In confirmation of this, he details fifteen cases of acute mania treated with success after his manner, and refers to fifty-seven others in which the remedy was equally beneficial. The following propositions furnish a summary of the Author's experience.

Every form of *acute* derangement, and particularly of mania, may be cured within one or two weeks. The treatment employed to obtain this result consists in the use of long-continued baths and irrigations.

Generally speaking, the bath must be continued for ten or twelve hours; it may be prolonged to fifteen or eighteen hours.

The irrigations should be employed during the whole time that the patient continues in the bath; but they may be suspended as soon as he becomes quiet.

When the patient has taken eight or ten baths without sensible improvement, their use must be suspended, to be resumed again. The temperature of the bath is from 28° to 30° (82·4 to 86 Fahr.); of the irrigating fluid, 15° (59 Fahr,)

Recent acute mania is the form which yields most readily to this mode of treatment; next in order come simple acute delirium, delirium tremens, puerperal mania, and, finally, melancholic monomania attended by acute symptoms.

Cases of chronic mania, or of acute mania, when prolonged; chronic mania with agitation, and intermittent mania, are relieved, but not cured. The method was not employed in cases of mania, with epilepsy or paralysis.

CHLOROFORM ON THE FIELD OF BATTLE.

The expedition against Rome has afforded, probably, the first opportunity of testing the effects of chloroform in cases of operations performed on the field of battle. In some very interesting letters, published by the *Gazette Medicale*, from one of the surgeons attached to the expeditionary army, we have many curious facts relating to military surgery, and amongst others the experience acquired relative to the use of chloroform. After the murderous affair of the Villa Pamfili, in which the Romans displayed a courage worthy of their ancestors, MM. Pasquier and de Santi made numerous efforts to obtain insensibility with chloroform, but failed. The occurrence of so great a degree of nervous agitation, that several assistants were hardly able to control the wounded patient, compelled the military surgeons to abandon the remedy. Its use appears incompatible with the excitement produced by a recent combat. In one case, after the third inhalation, the the patient was seized with violent agitation, which continued for half-an-hour, and then terminated in death. For secondary operations the chloroform was used with success; but even then it required to be administered with great caution, for the nervous excitement still continued in many patients.

Among the curious cases recorded by the author, the two following appear worthy of notice:—A Roman artillery officer exhibited the greatest bravery in the defence of his battery, at which he was cut down. His skull was literally mashed by twelve sabre wounds; he had ten bayonet wounds in the body, and a double fracture of the arm and fore-arm, yet he soon recovered. The other case presented one of those miraculous cures which nature sometimes effects, to show, as it were, her omnipotence. A soldier was struck by the fragment of a shell in the iliac fossa; the bones were smashed to fragments, the intestines lacerated, and, the projectile having traversed the pelvis, lay beneath the skin at the back. A quantity of excrementitious matter escaped through the wound, yet this patient likewise recovered; and, what is more, without a trace of fistulous opening. Well might we exclaim with the great Paré,—"*Je le pansai, Dieu le guerit,*"—I dressed the wound, and the Lord cured it.

ORGANS OF SENSE IN INVERTEBRATED ANIMALS.

It is now some ten or twelve years since the interesting discoveries of Ehrenberg revived the old discussion relative to the greater or lesser simplicity of inferior organisations in the animal kingdom. In France and Germany both sides of the question were taken up with the utmost animation; many errors were propagated, and much exaggeration prevailed, but the result of the controversy was a conviction, that even in the lowest grades of animal life there exists a complicated organisation far beyond what had been previously imagined.

One of the points which gave rise to the warmest discussion, was the existence or non-existence of distinct sensorial organs in many of the invertebrated animals. This point has been recently taken up by M. Quatrefuges and his researches, communicated to the Institut, have had for their object to determine how far the *annelides* are endowed with organs of vision. The selection of the organ was a judicious one, because it furnishes more certain indications than any other. Vision cannot be exercised without the medium of an instrument, the essential characters of which are in general easily recognized. The eye, in fact, is nothing but a *camera obscura*, in which the image formed by a converging lens is thrown on a kind of mirror, whence its impression is conveyed to the nervous centre. In every eye, then, we must have a lens and a retina. Starting from this principle, the author examined the *torreus vitreus*, one of the annelides inhabiting the Sicilian sea.

"In this animal the eye-balls are so large that they seem to form the whole head. Each globe is at least a millimetre in diameter, and this enables us to examine them in detail. I found a true sclerotic coat, a choroid, bearing a reddish-brown pigment, a transparent cornea formed by the skin, a large pupil, a vitreous body, and a crystalline lens. The latter is spherical, and its diameter one-fourth that of the occular globe. When placed in sea water, and allowed to receive parallel rays from the mirror of the microscope, this lens gave perfect images; and it was impossible not to admit that it belonged to an organ of vision."

The following are the conclusions drawn by the Author from his numerous researches:—

"1. The annelides possess the usual senses, except that of smell, which is probably confounded with taste. 2. In the majority of these animals, each sense has its special organ. 3. The latter, however, may be imperfect, when the sense becomes, in all probability, less perfect also. 4. The sense of touch is exercised through the medium of cephalic appendices, and the caudal appendices appear, in some cases, to play the same part. 5. The seat of the sense of taste is, probably, the inner surface of the trumpet. 6. Many species possess organs of hearing similar to those of the gastropode mollusca; but the organs are not cephalic. 7. The great majority have true eyes, which may be placed elsewhere than in the head, and receive their nerves from other than the nervous centres."

Hence, it appears certain that many of the annelides possess organs of relation as numerous, and perhaps as perfect, as most other aquatic animals of the highest type.

NEW MODE OF PERCUSSION.

M. Poirson, one of the internes at Saltpétrière, has proposed a new mode of percussion, which may, perhaps, present some advantages. The novelty consists in arming the finger which percusses with a thimble that fits in such a manner as to confine a

certain quantity of air between it and the end of the finger. This does not alter in the slightest degree the nature of the sounds, but renders them much more clear and intense. It has also the advantage of eliciting sound under a much slighter shock than in the ordinary way, and thus saves the patient from many disagreeable manipulations.

SCOTLAND.

[Edinburgh Correspondence.]

HYDROCELE WHICH CONTAINED SPERMATOZOA.

In a portion of a Clinical Lecture lately published by Mr. Syme, there are two points which have attracted particular notice here; first, the evidence of the utility of the undiluted tincture of iodine in small quantity as an injection for the radical cure of common hydrocele; and, secondly, the unexpected success of the same injection for the radical cure in cases where the evacuated fluid contains spermatozoa. Mr. Syme states that he had long since given up the port-wine injection in hydrocele, on account of its uncertainty; that he had afterwards employed the tincture of iodine, one part to three of water; but that, during the last five years, he had always injected the tincture alone, "without a single case of failure or unpleasant effect, either in public or private practice." The quantity Mr. Syme employs is about a teaspoonful, or as much as fills a common sixpenny pewter syringe, "which is the most convenient instrument for the operation, as the substance composing it allows the nozzle to be readily adapted to the canula of the trocar." He regards the undiluted tincture as giving less pain during the time it is retained than any other fluid that has been employed in this operation. In further evidence of the efficacy of this mode of treatment, he gives the history of a case, as stated by the patient himself, from which it appears that, fifteen years ago, when ten years of age, he had received a bruise on the testicle on horseback, which ended in hydrocele. Nothing was done for ten years, when he applied to the late Dr. Hannay, of Glasgow, who evacuated the fluid, but declined to attempt the injection, on account of the enlargement of the testicle. He was then treated in 1847 by Dieffenbach, at Berlin, by the method of incision, but after great suffering, the disease, though reduced, remained uncured. Dr. Angelstein next recommended the English method, or the cure by port-wine injection, but, as he had heard Dieffenbach declaim against this operation, he declined to submit. Dr. Buhring then attempted the cure by electricity, after the introduction of two rows of needles into the scrotum; and this failing, he proposed to perform excision—but hearing from home of Mr. Syme's success, the patient came to Edinburgh, and, as he says, is now completely cured by the injection of undiluted tincture of iodine, the operation being almost painless, and the confinement for three weeks being but partial.

It appears that Mr. Syme has treated two cases of hydrocele, with spermatozoa in the evacuated fluid, by the same injection, with complete success. In the first case the man was fifty years of age, a gamekeeper, who applied on account of a large scrotal tumour of eleven years' standing. The swelling had the ordinary characters of a hydrocele. After the operation was completed, in the manner already described, the fluid was examined microscopically, and found to contain myriads of spermatozoa. Mr. Syme says, had this been discovered before, the injection would not have been practised, as such cases have not done well under the ordinary radical treatment. He determined, however, to try the same treatment if another case of the same kind should occur. Soon after a gentleman presented himself who had been tapped for hydrocele twenty years before, by Sir Astley Cooper, and had subsequently been treated with the port-wine injection, by another surgeon, but remained uncured. The fluid evacuated presented the same opalescent appearance, as in the former case, and the microscope discovered abundance of spermatozoa. The cure in this case also was satisfactory.

SPERMATOCELE.

Mr. Syme terms these cases of hydrocele, in which the evacuated fluid contained spermatozoa, cases of spermatocele. Is this then the sense into which this word should at last settle down? It has been floating about apparently in search of a meaning for some hundreds of years. We do not indeed remember that it is used by any very ancient surgical writer, but Morgagni tells us that it was a mistake, a little before his time, to think that it was a new word. He argues against the sense attached to it by Barbette, of Amsterdam, who ranked it among the true hernias as signifying a peculiar corrugation of the vas differens and the descent of that vessel, like a hernia, into the scrotum; and he refers to the "Bibliotheca Anatomica,"—that of Mangetus, as we think,—in which it is described as a turgescence of the testes by an accumulation of their proper secretion, making them swell up to a great bulk, and sometimes giving rise to abscess adjacent to the epidydimis, with the contents of which seminal fluid may finally issue. Most modern authorities represent spermatocele as a turgescence of the testes by the retention of the secretion, but they hardly afford us the means of determining whether they think this name belongs to the mere simple swelling, or to this kind of swelling, because it sometimes ends in an effusion of seminal fluid, by a breach of continuity in some part of the surface of the gland. The first Monro describes *spermatocele* among the spurious hernias, representing it as a swelling of the testicle, from a stricture, or other obstruction, at the caput Gallinaginis, apt to degenerate into sarcocele. Brechet, in our own times, describes *spermatocele* as a swelling of the spermatic cord, and especially of the epidydimis depending on retention of the seminal fluid, among the consequences of which are bursting of the swelling and actual fistula, characterised by escape of the seminal fluid. South says, that spermatocele is a troublesome swelling of the testes from retention of the secretion; but, that he has seen no such consequences as those mentioned by Brechet. It does not appear, however, that the presence of spermatozoa in the fluid of any form of hydrocele had been observed till within the last ten years. Mr. Liston, in 1843, was the first to draw attention, at least in this country, to the existence of spermatozoa in the fluid of an encysted hydrocele; and immediately after, Mr. Lloyd found the like organism in the fluid of what he conceived to be several cases of common hydrocele. Velpeau says, these organisms were observed by Letellier in 1840, in the fluid of hydrocele at the Hospital La Charité, and that he himself observed them immediately after. Velpeau, however, insists that further evidence is required of these organisms being really spermatozoa. Of this, indeed, there cannot remain any doubt; and yet the precise conditions under which they appear in the fluid of hydrocele, seems to be still unknown. Mr. Lloyd's observations show at once that they may occur in the fluid of what seems to be common hydrocele, and yet that they are much more frequently absent; since out of thirty cases in which the fluid was minutely examined, he found them in no more than two. If the presence of these organisms were found to be connected with some particular form of encysted hydrocele, then there could be no objection to the term *spermatocele* being restricted to denote the form of hydrocele; but, so long as it is doubtful on what condition their presence depends, it is plainly advisable to abstain from adding one more to the numerous uncertain significations in which the unlucky word spermatocele has been employed.

SINGULAR SUICIDE IN THE EDINBURGH INFIRMARY.

A man of intemperate habits was brought recently into the Infirmary, with an aneurism of the femoral artery. The cure by operation was postponed for a few days, that his general health might be improved. He spoke quite rationally, and expressed a desire for the operation, as he feared the aneurism might burst. One night, soon after he was admitted, the ward was disturbed by the noise of blows, and it was found that he had struck himself several times severely on the temples with a metal jug. One of the resident Medical Officers was summoned, and the wounds were dressed. He appeared to have become quiet; when, as he was in conversation with the patient in the next bed, fluid was heard falling from his bed, which the nurse discovered to be blood issuing from the seat of the disease. Before the Medical Officer again arrived, he was in a dying state. It was found that he had perforated the aneurism with a pocket cork-screw belonging to himself, which he had concealed in his bed. No other conjecture can be formed of the cause of the sudden alienation of mind, than that it depended on incipient delirium tremens.

IRELAND.

[Dublin Correspondence.]

BOARD OF HEALTH.

The Board at Ely-place has been lately exhibiting signs of activity, through their very efficient officer, Mr. Hopper,—the statistics of the several Dispensaries being at present, for the hundredth time, in process of collection, previous, it is to be hoped, to some permanent arrangement of these Institutions by the coming Parliament. One of the local papers is angry that any notice should be taken of the sick poor by the Committees of the Houses, suggesting that the Poor-law should be entirely abolished, or the rates, as ingeniously suggested by Mr. Butt, paid out of the Consolidated Fund; till this epoch arrives, however, the suffering poor must be attended. The harrowing tale of fever and famine, summed up in the last *Medical Times*, exhibits with what fidelity the medical men in Ireland have done their duty; and that, in addition to the trials there witnessed, they should suffer from the general distress of those who formerly subscribed to the different Medical Charities, would be deeply to be deplored.

OPHTHALMOLOGY.

A Treatise on "Inflammations of the Eye-ball" has just made its appearance, from the pen of Dr. Jacob, including all the varied shapes of this disease,—Idiopathic, Scrofulous, Rheumatic, Gouty, Syphilitic, Gonorrhœal, "Post Febrile," and what Dr. Jacob calls "Neuralgic" Inflammation,—with some forms of Inflammation of the Cornea, Membrane of the Aqueous Humour, Choroid, Chrystalline, and Lens. Few, in Ireland, have had the opportunities of studying this class of diseases both in private and at the "Baggott-street" Hospital, that Dr. Jacob has had; the work, therefore, especially among his own pupils, (with whom the worthy Doctor is sometimes a little *brusque*,) has been regarded with much interest. Though not much given to the transcendentalisms of the newer Continental Schools, the work at once stamps Dr. Jacob as a deep observer and sound practitioner.

CONTAGIOUSNESS OF CHOLERA.

This subject seems as unsettled, at least in Dublin, as ever. The observations of Dr. Donovan, mentioned last week, would lead to the belief of there being no second opinion in the matter, while some remarks of Dr. Sunter, communicated to the *Medical Press* this week, are quite as conclusive on the opposite view of the question. Dr. Sunter thinks a deal of unnecessary discussion has arisen about contagion; that like typhus, scarlatina, measles, smallpox, or erysipelas, cholera, under particular circumstances, becomes contagious; that, if you crowd together cholera patients, the disease becomes contagious. He does not believe cholera a whit worse than scarlatina, or what he calls "epidemic mucous catarrh;" that, "like a comet," "it is a thing to wonder at." The views of Dr. Sunter are not without interest. It is quite clear he has not had the same kind of patients as the poor of Skibbereen or Dublin; that in his hospital, where he has had "all appliances and means," his patients otherwise healthy soldiers, that the disease has been more manageable; that if we could but raise the social condition of our city populations, we might be possibly as successful in grappling with this fearful scourge. Sunter speaks of "contagious clouds of cholera in the air," a highly expressive phrase; and could he but understand how these nebular masses settled down in all the low parts of Dublin, in the dingy lanes, for instance, about "St. Patrick's" Cathedral, or at the opposite side of the river, near "the Richmond," a locality not entirely unknown to him, his opinion

might undergo some modification. The question, in all its bearings, is no doubt one of the most intense interest, one on which some of the first men in the Profession—Dr. Graves, for instance, known through Europe—have entertained very peculiar views. The experience of the last year has thrown much light on the question. The disease, it is clear, in the ordinary acceptation of the term, is not contagious, no more than ordinary "relapse fever," for two or three days at least. There is not time, perhaps, for the formation of malaria. On the contrary, among the poor of Skibbereen or Dublin, where the whole physiological structure of the system is falling in pieces, malaria is quickly formed, the disease spreading more quickly and fatally, and in many circumstances simulating contagion.

And speaking of this wretchedly disorganised state of the system in the poor of Ireland, during the late famine, the cases, not very different, of want of action in the lower bowel, mentioned by Dr. Banks in one of the Numbers of the *Quarterly*, and brought again into notice by Dr. Popham, in the *Lancet*, have been the subject of some discourse. The disease is one of the most frightful that can be imagined; and, as peculiar to Ireland, deserves a passing notice. The description of Dr. Popham is highly graphic; indeed, any one who has seen the disease, as I have myself, can never forget it. The agony of the patient, in some of the worst cases, is dreadful; the smell beyond anything that can be imagined by one who has not met with the disease; a month's washing will not get it off the fingers that have once examined the rectum. Every other day, in spite of a sea of eau de Cologne, it haunts the memory. The disease may be, perhaps, termed

THE POTATO FIBRE PACKING OF THE RECTUM.

The origin of the potato disease, in the plant itself, is not very clear; it appears certain, however, that at the return of the "cambium," the proper formation of starch was interfered with, and that, in addition to a few store-cells, the bulb was merely made up of its usual fibres, and cell-walls depressed and weakened to a degree that can scarcely be imagined. The poor of the South and West strove to lessen the pangs of hunger by masses of these black potatoes,—mere indigestible fibre. Examined with a microscope, as one would expect, a total absence of starch was found. Passing through the upper portion of the intestinal canal, the small amount of digestible matter was, of course, removed; but getting into the colon, and lower down, the aggregation of huge masses of a thing like chopped hay took place,—in some fatal moment the rectum refused to act. Medicine seemed but to aggravate all the sufferings, till mechanical means, especially in women, had unloaded the cells of the rectum. The miserable creatures, the subjects of the disease, tossed about in the wildest agony; the hands pressing the lower part of the abdomen. Days and nights passed in this way without relief. Everything but aggravated the sufferings. Stuping, &c., was tried, all in vain. The rectum pressing on the bladder, new tortures were added. A horrid sanious matter escaped, and gave out the most horrible stench; tenesmus and bearing down filled up the list of horrors. The disease is quite a new one; and, as it is not impossible it may arise from other causes besides the one specified, may be worthy of recollection.

ANATOMY AND SCHOOL OF DESIGN.

At a meeting of the Dublin Society, on the 21st inst., Dr. Croker King delivered a highly valuable discourse on Physiology and Anatomy, in connexion with the study of Design. Lord Clarendon, whose popularity in Ireland seems ever on the increase, from his excellent good sense in everything relating to the country, seconded the proposal of the Lecturer, in one of his quiet, but usually apposite addresses. Not unaware, perhaps, that Della Torre and Da Vinci changed the easel occasionally for the forceps and dissecting knife, and schooled themselves in the fine models of the Spanish galleries, Lord Clarendon addressed himself to the subject with much fervour; as well observed by him, "Nature is the *grammar* of the designer;" and if our students would trust more to her guidance, we should not be shocked by those anatomical shapes that so often outrage her forms. The "artistic aptitude" of the Irish student Lord Clarendon very correctly rated higher than that of the English; he seemed to think there was far more genius, certainly more imagination among the former than the latter. Facts, too, he said, bore him out; for already, in the Dublin school, there were 400 students, while, even in London, it had only very recently amounted so high. The "Physiology of Taste" was alluded to in the earlier part of the evening, the entire address leaving an impression, that His Excellency had deeply studied the subject himself, and deeply felt its value. The Address of Dr. King, and one some time since on the kindred subject of "Botany in relation to Design," by Dr. Harvey, the first botanist of Ireland,—invited since to America to lecture,—are very worthy of the study of the Profession.

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THE MEDICAL TIMES.

SATURDAY, JANUARY 26, 1850.

MERE partizanship in relation to Medical Reform cannot fail to prolong agitation, by giving a temporary importance to false opinions, and complicating the difficulties that already exist. It is attended also with much that is discreditable, as it clokes itself in secresy, avoids free and honest discussion, indulges in a clandestine exposition of sectional views and personal interests, and tries, by the indirect arts of cajolery, menace, or compromise, to accomplish its own ends, rather for the purpose of defeating opposition than of establishing just principles. We have made it a duty to examine the propositions of all parties as they may have incidentally or directly come under our notice, for whatever may be considered to possess matter of interest or consequence to the Profession generally, or to any section of it, must be also of importance to our readers. They stand before us for the whole Profession; and indeed, in a wider sense, it may be literally affirmed that there are few intelligent practitioners who do not now read the *Medical Times*. Our pages, therefore, are a field for candid discussion. We have no party views; and we are resolved that, wherever the cloven foot of sinister self-interest shall obtrude itself, from beneath the folds of its meretricious disguise the spear-point of open investigation shall fix it to the spot of its opprobrium, and we will strip it of the drapery that would hide its deformity from the public's eye. A good cause ever shows a bold front. A true knight, "*sans peur et sans reproche*," would scorn to sneak into a battle-field, or to steal a victory.

Within the last week or two the members of the Manchester Committee of Surgeons, and the Shropshire Association, wishing to act simultaneously, if not in unison with Mr. Bottomley, have presented Memorials to the President of the Royal College of Surgeons, praying for an alteration of the Charter of the College. The Memorial from the Manchester Committee is published in another column, but the Shropshire gentlemen have not given their document the usual publicity. A contemporary certainly obtained a copy of the precious document; but this exceptional fact only proves our statement, for the ignorance of the subject of Medical Reform, and the petty sycophantic policy evinced in that print, have long deprived it of all authority upon the question, and reduced it to the very humble office of playing Shadow to the Moonshine of little demagogues. It has become, in fact, the receptacle of defunct prejudices. It would be an act of mercy to let these extinct dogmas sleep there in peace; but we are sometimes called upon to break burglariously into such dead-houses, and to abstract the putrifying contents for the purposes of dissection, and to benefit living sufferers.

The two Associations named, together with that of the Associated Surgeons, presided over by Mr. Bottomley, have constituted the *cheveux de bataille* of the journal in question for these last three or four years, and the Profession will not, therefore, be surprised that they should be again called into activity at this crisis. Their views, however, are discrepant, and although they are united in hostility, they appear to be jealous of opinion. This may be, notwithstanding, a mere appearance, adopted the more skilfully to conceal the source from whence in common the inspiration of each was derived. We cannot help feeling a sense of pain and humiliation whilst reading these spiritless documents.

The Shropshire gentlemen adopt the resolution of the Council of the College, upon which we have lately commented, with the modification, however, of a TWELVE years' instead of a twenty years' franchise. Nothing can be more paltry than this submission to the vote of the Council. It is mean-spirited, at the same time that it tends to set the seal upon the unjust exclusion from the Fellowship of large numbers of provincial surgeons, living in retired situations, or possessed of small means, who cannot, from these causes, meet the requirements of the resolution, but who are, in other respects, far more eminently qualified for the Fellowship than the two or three bustling agitators who have got up this Memorial, but have been afraid to publish it to the Profession from a just apprehension of the criticism it would evoke. These gentlemen, besides, do not desire a wider enfranchisement than would be sufficient to admit the members of the College who obtained their Diplomas prior to the year 1843; forgetting, that since that time between *three* and *four thousand* new members have been received, who have as strong a claim on the Government for admission to the exercise of their corporate rights as the Memorialists themselves; forgetting, too, all future members, who, the Memorialists may be assured, will never cease to agitate until they have been invested with all their corporate privileges. It is true that the Memorialists provide for admission to the Fellowship by examination; but if this mode of obtaining the Fellowship be the only one that these worthies consider just in principle, let them nobly forego their personal grievances, and present themselves for examination. There is no necessity for an alteration of the Charter in order that *they* may be admitted. It is said,

however, and by good authority, that the members of this particular Society will never consent to any re-arrangement of the Profession until they have been admitted to the Fellowship of the College of Surgeons. The unmitigated selfishness of this policy requires no comment to expose it to the contempt of the Profession.

The Manchester men are wiser in their generation. They demand the Fellowship for all *existing* members who now have or may hereafter arrive at a *fifteen* years' standing. *Future* members, however, shall be admitted to the Fellowship only by examination. The Manchester men, in getting off one horn of the dilemma, fall heavily upon the other. They have a prudent regard for the 3,000 men who have become members *since* 1843, and would introduce them to the Fellowship upon the same terms as those who were members *prior* to the year 1843. Now, what right to the Fellowship have these 3,000 members, who have become such since the great iniquity of 1843, that future members have not? If these gentlemen have a right to it, the members prior to 1843 can have no more, and future members no less. Either the Manchester Committee propose to admit these gentlemen in defiance of their convictions of justice, for the sake of conciliating support for their schemes of self-aggrandisement, or otherwise they are yielding to a sense of right, and think that every member is entitled to a vote in the election of the body that spends his money and governs his interests. The Manchester men are notoriously "*cute*," and can comprehend the essentials of an argument as quickly as most people; and we, therefore, give them credit for the latter supposition. But, in such case, all future members are equally entitled to a vote; and, we inform the Manchester Committee, that, whether they say yea or nay, the members will have it.

Beyond these matters, there are some shadowy suggestions about a joint Board of Examiners in Medicine, Surgery, and Midwifery; but this subject is so indistnctly dealt with, that it would seem that the Memorialists had no clear understanding upon the matter, and cared not much, so that "somehow or other" a compromise of some kind or another was made up, and they were admitted to the tranquil beatitude of an aristocratic siesta upon the privileged benches of the Royal College of Surgeons. May their slumbers be light, and their dreams golden. The Fellowship in possession, is an Examinership in prospect; and it is but reasonable that the honours of the College should be followed by its rewards.

We are glad that these Societies have spoken out. In common with the rest of the world, we have a great dread of dumb oracles. Frowns and shakes of the head are portents of terror to our hearts, and we would rather, at any time, be the subjects of hard words than black looks. The Council of the College can now choose between these rival schemes. From the concoction of the Shropshire Society, just palatably acidulated by the smallest possible infusion of lactic acid, up to the corrosive vitriolic compound of Mr. Bottomley, there is ample room for selection. The most amusing part of the matter is, that Mr. Peploe Cartwright, the Secretary of the Shropshire Association, and Mr. Bottomley, the Chairman of the Committee of the Associated Surgeons, are the members of a united Committee, and are supposed to entertain identical opinions. It is not easy to divine how these gentlemen can understand each other; but there are many mysteries in medical politics, and perhaps this is one of them.

The Council of the College, however, cannot escape their duty because of the multiplicity of schemes propounded to them by volunteer counsellors. The franchise must be extended. Independently of all scientific claims, the members must have a home,—a right of expressing their opinions upon all public questions at General Meetings,—and a vote in the election of their governing officers. These are essential corporate rights, bought by the members when they paid for their Diploma; and, unless the exercise of them be granted to the members, and the College be thus constituted the home of the members, there will be no peace for the College of Surgeons.

MR. SYME ON MEDICAL REFORM.

When the President of a College breaks silence on such a subject as Medical Reform, the Profession is bound to listen with respectful attention; but when, as in Mr. Syme's case, to the accident of position is added the possession of undoubted abilities of a certain order, that which the office claims the man commands. Still, in a matter which must exert so great an influence over the welfare of every member of our Profession, the dicta of no one, however high his station, however great his abilities, however warm his zeal, ought to be received unquestioned.

There are two idols which lead most men astray when they touch on Medical Reform,—Interest and Prejudice. Both appear to us to have exercised a powerful influence over the Regius Professor. Prejudice, educated as we were in Auld Reekie, and honoured with the Fellowship of one of its most venerable Institutions, might perchance lead us, as they have Mr. Syme, into partizanship, if our sense of duty, as holding the balance of the public Censor, did not prevent. Pecuniary interest, fortunately, cannot even be imagined to sway us.

The object of Mr. Syme's Letter is, nominally, to impress on the Lord Advocate of Scotland, "the crying injustice of that law by the action of which it is rendered impossible, by any extent of education or examination in Scotland, to obtain the right to medical practice in England." Now, is the implied meaning of this statement correct? It is not. The Medical Schools in Scotland are on the same level, with reference to the power to educate, as those in London. Certificates of attendance on Lectures are received by the Apothecaries' Company, the College of Surgeons, and the London University, with equal favour, whether granted by the Professor of Medicine in the University of Edinburgh, or King's College, London.

"The object of our desire," says Mr. Syme, "is not to licence, but to teach." This object, we repeat, is in no way interfered with by the existing regulations of either of the Licensing Bodies in England. The pupils of the English Schools have to pass an apprenticeship ere their certificates of attendance on Lectures can be received at the Hall; and in England, as in Scotland, the Medical Schools have to regulate the order and length of their courses to meet the requirements of the Licensing Bodies. The duration and succession of the various lectures must ever be determined by that Body which grants the license to practise; and surely Mr. Syme would not publicly advocate the propriety of permitting the teachers in any school to license the men they have themselves educated.

Having thus set out with a fallacy, Mr. Syme proceeds to magnify the imaginary hardship by a comparison between the Scotch and English schools of medicine. We shall limit ourselves, in the present Article, to a consideration of this comparison. And we enter on the subject, 1st. Because the statements of Mr. Syme may be credited by the learned and influential gentleman he addresses, ignorant as all Lord Advocates must be practically on the subject; and 2ndly. Because some of the reasons urged for giving a higher place to the Scotch than to the English schools, involve such fundamental errors in the policy of Medical Government, that it appears to us absolutely necessary to enter our protest against them.

Mr. Syme states, "that to the medical schools of Scotland must be conceded a *higher* place than to those of England; "that the system of teaching in Scotland is *much more complete and ample* than that of England." We shall examine the grounds assigned as the foundation for the above statements *seriatim*.

1st. "Many of the Scotch Professors hold their appointments direct from the Crown."

We own we are at a loss to conceive how this very objectionable mode of appointing school teachers can be regarded as adding to their efficiency. When the Crown has a Professorship to bestow, the question of who will obtain the vacant chair is not to be answered, by determining which of the candidates is the best man, but what are their political opinions, and what the interest that each possesses. We have heard even of him who, when the happy moment came that his star was in the ascendant, induced the holder of a certain chair to vacate at that particular moment for a *peculiar* consideration—of more than one Professor who would never have held his present chairs if his wealth had not been more potent than his merit.

A Secretary of State for the Home Department is necessarily ignorant of the respective qualifications of the rivals. Magniloquent testimonials are to be had by any one,—therefore, where all are first-rate, Sir James or Sir George naturally chooses him who has the greatest interest. It appears to us that Regius Professors, like Divine Doctors, derive a very questionable honour from the source of their elevation.

2ndly. "The University of Edinburgh has had upwards of 100,000*l.* from Government, and still receives more than 1,000*l.* a-year for the payment of expenses connected with the Medical Faculty of the University."

One can scarcely keep countenance when this is urged as a ground of superiority. The London schools might with reason complain of the injustice of such grants; but how a teacher, without blushing, can put forth a claim for superiority over his brethren, because he is permitted

to dip his hand into the public purse, we are at a loss to conceive. It has always, moreover, appeared to us, that such a mode of paying certain Professors, was not only unjust to their equals, but, what is of far more consequence, likely to to be injurious to the interests of their students. The man whose income depends on the excellence of his teaching, will be more on the alert to benefit those who resort to him for instruction than he who receives his salary from Government, without reference to the number of his class. For our part, we think the sooner such grants are stopped the better. If the English schools can support themselves unaided by Government, we cannot conceive why the Scotch schools should be allowed to draw on the public income.

3rdly. We are informed that "all the Medical teachers in the University of Edinburgh not appointed by the Crown, are chosen by the Lord Provost, Magistrates, and Town Council,—not as in London, merely from the narrow circle of aspirants, who, by filling in succession the position of dressers, assistants, demonstrators, or other subordinate places, are regarded as having a claim for preference; but with perfect freedom of selection, and without any admission of respect being due to local connexion." This sentence caused us no little astonishment. We could scarcely believe that the man who penned it, was the same who, a few months since, had himself held office in one of those very London schools which, he declares, elect none but their own pupils. Mr. Syme cannot be ignorant that his predecessor and his successor, as well as himself, received their education in schools totally unconnected with University College. Nor can we suppose Mr. Syme ignorant of the name of the school in which the present distinguished Professor of Surgery in King's College was educated. The last Medical appointment save one in this Metropolis, was that of Dr. Peacock, an Edinburgh man, and not long before the Assistant-Surgeonship of Middlesex Hospital was given to a St. Bartholomew student. But, is the mode of electing the Professors of the University of Edinburgh by a limited number of tradesmen—fleshers, bakers, printsellers, and paper-makers, disguised under the appellations of Lord Provost and Bailies—preferable to that adopted in the London schools? We opine not. The before-mentioned honourable disposers of wares have an appointment of so much a year to give away; to obtain it is, and must be, a matter of personal interest,—one, we should say, purely of "local connexion."

4thly. "In England," says Mr. Syme, "a large part of medical education is derived from self-constituted teachers, young men who have made no serious preparation for teaching." In Edinburgh *we* remember well certain not aged extramural lectureers, or small would have been our own knowledge of some subjects connected closely with our Profession. But here, as in every part of his pamphlet, Mr. Syme, when it suits his purpose, speaks of the Edinburgh University as the Edinburgh School of Medicine without reference to these extra-mural lecturers; while on other occasions he classes all together as the Edinburgh School. So with reference to the London School, Mr. Syme applies the term to the whole of the Schools of Medicine in London, when by so doing he can detract from their value; while, on the other hand, he speaks of each singly as the London School, when that serves his object.

5thly. "In London, the lectures on such important subjects as surgery are given only three times a week," and "the system of clinical instruction is so imperfect that the University of Edinburgh are unable to recognize certificates granted at the Metropolitan School." When we remember that the above is written by the Professor of Clinical Surgery in a school whose "object of desire" is to get students—that it is the teacher *par excellence* of Clinical Surgery that speaks *in propriâ personâ*—that it is Mr. Syme who vaunts his own superiority over the distinguished Metropolitan surgeons whose names confer honour on their respective Schools, one feels, to say the least, that modesty is not the Regius Professor's characteristic trait. The fact is, that surgical lectures are given in London four times a week for *seven months*, instead of, as in Edinburgh, six times a week for between *five and six months*; and clinical lectures are given five times in a fortnight (in one, at least, of the Metropolitan Schools), the regulations of the Edinburgh University only requiring two a week. The Lectures on Clinical Surgery of the Metropolitan School (at least using the word in one of Mr. Syme's senses) are, then, recognized by the Edinburgh University.

6thly. So far from thinking with Mr. Syme, that attendance on a six months', instead of a three months' course of Materia Medica is desirable, we would strongly recommend the Edinburgh University to follow in the footsteps of the Apothecaries Society, who have deliberately, and by the advice of a large number of the London Lecturers, altered their regulations.

We strongly suspect that the worthy President never heard a six months' course of Materia Medica. If so, let him consult, not the Professor, who ever magnifies the importance of the subject he teaches, but one who has recently graduated, and he will tell him that at least half of the six months' course he so greatly admires, is taken up in repetitions of what has been already more fully taught in the classes of chemistry and botany, and a varying proportion of the remainder of the course with learned, but certainly not very edifying, disquisitions on tobacco, snuff, and wine.

In conclusion, we would assure Mr. Syme, that while the Edinburgh school ranks amongst its teachers Alison, Christison, Bennett, Miller, and Simpson, it need not ground its claims for a high position on the somewhat questionable honour of having its teachers appointed by Secretaries of State for the Home Department, or by the worthy body of Bailies, nor on the still more questionable honour of drawing a yearly stipend from the public Exchequer.

We pass by the absurd comparison between the Edinburgh Infirmary and the Metropolitan Hospitals, convinced that those who read it will have the first interview between Master George Herriot and Ritchie Moniplies of the honourable house of Castle Collop, as forcibly recalled to their memory as it was to ours.

"The West Port," says Ritchie, "is a gate of our city, as yonder brick arch of Whitehall forms the entrance of the King's Palace here, only that the west port is of stonern work, and mair decorated with architecture and the policy of bigging."

"I suppose you will tell me next, you have at Edinburgh as fine a navigable river as the Thames with all its shipping."

"The Thames," exclaimed Ritchie, with ineffable contempt, "God bless your honour's judgment, we have at Edinburgh the water of Leith and the Nor Loch." On finding his interrogator was a Scotchman, Ritchie added, "I took your honour for an Englisher! But I hope there was naething wrang in standing up for ane's ain country's credit."

"Do you call it for your country's credit to show that she has a"—

We forbear the remainder of Master George's reply, fearing lest, if we finished the sentence, we might appear personal.

Having thus disposed of some of the extraneous matter contained in the Letter to the Lord Advocate, we shall, in our next, consider Mr. Syme's scheme of Medical Reform.

ABUSES IN PRIVATE LUNATIC ASYLUMS —RIDGWAY HOUSE.

We sincerely hope, that during the ensuing Session of Parliament, the Legislature will introduce some measure for the amendment of the Law of Lunacy, and the better regulation of private Lunatic Asylums. These establishments are very justly viewed with suspicion and distrust; the public has no confidence in them, because, ever and anon, as the curtain is incidentally drawn aside, and we have an opportunity of observing the manner in which they are conducted, abuses are discovered which make humanity shudder. Not many months ago an inquiry was instituted by the county magistrates into the management of the Fish-Ponds' Lunatic Asylum in Gloucestershire, and from the testimony of numerous witnesses, it was clearly proved that the patients therein confined were subjected to the most horrible neglect and maltreatment. The old inquisitorial means of mechanical restraint—chains—iron rings—shackles—hand-cuffs—leg-locks—hobbles—muffles—were indiscriminately had recourse to; and, when these instruments of torture were ordered to be removed into the store-room, the quantity of them amounted to not less than a quarter of a hundred weight! (Report, p. 171.) It was furthermore shown, that patients who were dirty, were stripped and taken naked into the yard, where, in the open air, they were mopped down with a common mop dipped in cold water. The cruelties, in fact, described in this Report, are so revolting, that we might well ask with astonishment, whether we are really living in a Christian land?

An investigation of an equally painful nature, and of a somewhat similar description, has also, at the instance of the Gloucestershire magistrates, lately been instituted into the management of Ridgway House, a private Lunatic Asylum near Bristol, then under the superintendence of Mr. Ogilvie. In the *Medical Times* of the 24th of November, 1849, we called attention to the Third Report of the Gloucestershire Magistrates, detailing the irregularities and abuses which they there noticed; and, as we would feign hold the scales of justice with an impartial and even hand, so as to weigh carefully the evidence—*pro* and *con*—between the accuser and the accused, we inserted also, on the 29th of December following, a long letter from Mr. Ogilvie, defending himself from the charges and

imputations brought against him. The Fourth Report of the County Chairman—Mr. Purnell—to the Gloucestershire Michaelmas Court of Quarter Sessions is now before us, and the evidence it contains proves to our mind, more conclusively than ever, the absolute necessity of the Legislature interposing its authority to revise altogether the existing system of private Lunatic Asylums. What are they at present more than individual pecuniary speculations, conducted under the arbitrary will and caprice of their proprietors? Is the poor lunatic doomed to be cut off from all sympathy with his fellow-men, or is he really a State care to the Legislature, which professes to throw around him the protection of a Commission in Lunacy? Let facts speak for themselves! And first, we may ask, does Ridgway House possess the capacity and appurtenances which warranted its being licensed at all for the reception and treatment of the insane? We apprehend not. The entries of the Visiters state, that many of the rooms are so small and confined as to be wholly unfit for patients; besides which, the out-door accommodation—although the surrounding scenery is exceedingly picturesque and beautiful—would appear to be equally restricted. Upon these points we make, from the Fourth Report, the following extracts from entries made in the "Patient's Book," and "Visiters Journal" of this Asylum:—"There does not appear to be any outlet whatever for the male or female patients, except one large ground, to which they can have access only with a keeper, and at stated times." "Mr. H.'s room is only six feet eleven inches high, and only four to the slope of the roof; and the adjoining room through which it is approached is only adapted for a closet, lighted by a window to the stairs, and wholly unfit for a keeper's room, to which it has been appropriated." On the 31st July, 1849, the Visitors found "this attic bed-room occupied by a patient taking his meals there and then, wholly confined there, and the outer closet was still used as a keeper's bed-room." The entry gives the dimensions of several other attic-rooms unfit for patients; and adds, "There is an outer room used for a dirty lady patient, only five feet ten inches wide, and eleven feet long. This room is exceedingly offensive in smell. The patient is strapped to her bed every night." In another entry, signed by six Visitors, it is stated, "We consider this room to be wholly unfit for this or any other patient." It is also reported, that "there are no fixed baths in this establishment. There is a moveable bath, in which we found a hen's nest with eggs in it; the hen leaving it, and a warm egg, on our approach." Six months afterwards another entry states, "Again saw this bath in an outhouse filled with different articles, and were informed that it was rarely used, not even for a dirty patient, who required it daily." A much graver charge, however, is brought against Mr. Ogilvie in the Report before us, which is that of keeping in confinement, and protesting against the discharge of a patient whose recovery had been reported to the Court.

"Strong in body and sound in mind," observes the Report, "Mr. Ogilvie kept him closely confined and locked-up in his bed-room for nearly five weeks, granting him but little exercise, and that only with a keeper in the garden, administering to him during such time powerful medicine. Not allowing him access to a water-closet close to his room, he could only have recourse to a convenience within it, on many occasions not daily emptied. The stench that he lived in is described by the witnesses as intolerable."—Fourth Report, p. 14.

Furthermore, it is stated, on the authority of Mr. Hasell and Gregory—

"That, by the 5th June, he had become much altered, reduced in flesh, pale and haggard in countenance, and his strength so prostrated, that, from riding thirty miles a day, as at the time of his arrest, he could not then at times walk without assistance; that he talked quick and ramblingly, and evinced in his manner much nervous excitement, and that his condition produced their remark, that it was evidently Mr. Ogilvie's intention, by medicine and confinement, to prevent his discharge."—Ibid, p. 15

After this, it is added, that—

"Mr. Ogilvie again confined him closely to his bed-room, as before, for a month, for begging a visiting justice's servant to ask his master to visit him; and again for a fortnight, for sending the same magistrate a brace of birds, being dosed on each occasion."—Ibid, p. 15.

We confess that we should hesitate before we could believe in these statements, did they not come before us formally and officially authenticated by the Chairman of the Court of Quarter Sessions; and when we look carefully over Mr. Ogilvie's letter of defence, we regret to find no counter-evidence—but, on the contrary, many admissions which appear to be collateral evidence in support of the charges against him. Thus, he tells us that "several of his patients," after "more or less perfectly recovering," have been permitted to "remain in his house for years," and others have "placed themselves under his care without certificates." Before the passing of the late Act this was not illegal, and Mr. Ogilvie questions whether the Commissioners, in objecting to these practices, have not given "a fatal blow to the greatest improvements of which Asylums are capable?" We know not what notions may be entertained respecting the improvements which private Lunatic Asylums may be capable of; but from the evidence before us we are of opinion that Mr. Ogilvie has done quite right in withdrawing from the management of this Establishment, and that Mr. Purnell, the County Chairman, and his brother magistrates, have performed, albeit a painful, a very imperative public duty.

WATER FOR LONDON.

We are glad to find that a Report has been furnished on the projected plans for the supply of London with water by the Henley and London Commission, and the Metropolitan or Maple Durham Company; and that notices and applications to Parliament have been lodged. These Companies propose to give a more ample supply of better water to the whole of London, than that afforded by the seven Companies at present in existence; and as much of our prospective sanitary improvement depends on the working of one or other of these plans, they may be worth examining.

The Henley plan is the oldest: it proposes a commencement by an aqueduct from the Thames, four miles below Henley, coming first by an open canal as far as Drayton; hence to the river Brent, and thence, by brick culverts, to Hampstead and London. The lock above Henley is 88 feet above high water in the Thames; the whole length, through a multiplicity of windings, not less than about thirty miles; and three reservoirs for the water are proposed, in the *trajet* of its course to London. So far so well.

At Hampstead it is proposed to raise the water by steam to an elevation of not less than 250 feet above high water, for the supply of London;—and how is this to be done? It is proposed to force the water into the mains of the old Companies, whose works are to merge into the management of the new Commission—the old Shareholders, of course, being indemnified.

Three hundred million gallons in twenty-four hours will be thus supplied,—a supply very far above that at present doled out to our immense population.

The proposal to flush the sewers of London, by means of the large aqueduct at Drayton, is highly deserving of attention. As far as the health of the Metropolis is concerned, nothing can be more desirable. Without some such arrangement, indeed, we almost despair of the health of the vast microcosm about us ever being what it ought to be. The waters of the upper Thames could not be better employed.

The second proposal is that of the "Metropolitan" Company, by which the supply is to be attained seventeen miles higher up the river than the Henley, and to be purified on Dr. Clark's patent process; and distributed to the three levels into which London is divided—the northern or western district, 120 feet; the centre district, comprehending, of course, the City, 70 feet; and the south and east district, 10 feet above high water. The highest of the reservoirs is to be 233½ feet above high water. One at St. Giles's, 114. This Company is to be a joint-stock one.

The difference in the money-making way, between the two Companies, consists in this,—that one proposes to take possession of the present Companies' works, while the other merely proposes to bring fresh water to the present Companies and selling it to them. The present supply of water to London is something under fifty million gallons per diem. The supplies offered by the two Companies under discussion are very considerably over this, and as such very worthy of our notice.

The Henley plan has been objected to, from the liability of an open canal to receive impurities, and its progress impeded by ice. The other arrangement, on the contrary, would seem to be preferable, as the water of seventeen other miles are added at Henley, Reading, Wargrave, &c., besides the fresh springs of the Loddon and Kennet.

At Staines, the reporters state, four hundred million gallons may be safely taken out of the Thames. At Teddington, eighteen miles lower, five hundred; but higher up, as at the points we speak of, the supply is necessarily limited.

Some little difficulties, of a no insurmountable kind, seem to offer themselves in the way of navigating the river, if the supply were taken from the sources we have spoken of. The traffic, by a little ordinary precaution, however, is not likely to be interfered with; and we trust the health of this vast Metropolis will far outweigh all such minor points.

We are quite aware many other Companies will be starting up, now that we are on the

threshold of Parliament. We are glad, however, to find a stir making on the subject; the facts stated above cannot fail to interest our readers; and we are almost inclined to hope something permanent will be done.

If we have a word of counsel to offer in the matter, it is this:—that the HEALTH OF THE METROPOLIS should outweigh all other considerations. Private and public interests will clash, perhaps, to the end of time; but no one will say the latter are not to be preferred to the former. If there is one thing more than another we want, as palpably demonstrated among the poor during the late visitation, it is a supply of *pure* water; if we can have it, then, at any reasonable cost, far away from the sound of Bow-bells, and the shadow of St. Paul's, so much the better: the higher up the river the better,—the larger the quantity in amount the more welcome.

REVIEWS.

On Stricture of the Urethra and Fistula in Perineo. By JAMES SYME, F.R.S.E. Edinburgh: Sutherland and Knox. London: Simpkin, Marshall, and Co. 8vo. Pp. 72.

Some few years ago Professor Syme published, in the *Edinburgh Monthly Journal*, an acconnt of a new method of treating certain forms of stricture of the urethra. His recommendation, however, of this particular plan did not, according to the Professor's showing, have the effect of inducing any members of the Profession to adopt it; consequently, he has determined to try the most effectual mode of bringing surgeons to carry out his practice. He has collected together the cases of a more extended experience, and by these means, and with the help of some general observations on the subject of stricture, has furnished us with a thin octavo volume; and we dare say that Mr. Syme will not be so much disappointed as he has been on a prior occasion. His object is to show the good effects of dividing a stricture of the urethra, by free external incision, to certain instances where the more common methods of treatment have been found unavailing.

Every Surgeon who has had much to do with stricture must every now and then have met with one of those very obstinate and troublesome cases, in which very little good has been effected by means of the catheter, where dilatation could only be carried to a certain extent, and no further, the patient being left, after many weeks' treatment, much in the same condition as when it was first commenced. Either from some peculiar irritability of the part, or from some other cause, the stricture resists dilatation, and as soon as instruments have been omitted, speedily and obstinately again contracts.

The Author has accurately pourtrayed the characteristics of these cases, and he particularly insists upon the aptitude of the stricture to contract, as the main feature of difficulty.

In order to bring about a satisfactory cure in such instances, Mr. Syme divides the stricture with the knife by means of an external incision through the perinæum. In order to facilitate the operation he first passes a small grooved director through the, obstructed portion of the canal, and divides the stricture upon it, from behind forwards. Eleven cases are narrated in the present work, where this plan has been pursued with a great amount of temporary success at least; and, it appears, that the individuals upon whom the operations have been performed, have suffered nothing or little from them. The first case narrated is a remarkable instance of the benefit of this proceeding, and well illustrates the aptitude for contraction the urethra possesses, as soon as instruments have been omitted; and which forms the main feature of difficulty in these cases of stricture.

The reader is aware that there is no novelty in dividing a stricture by external incision through the perinæum. It is an operation which has been practised for centuries; but, there is this difference between the operation here recommended, and that usually performed. Mr. Syme puts his proceeding in force only in cases where an instrument can be *first passed through the stricture.* Whereas, it is only in cases where no instrument of any kind could be introduced, that surgeons have generally been in the habit of resorting to perinæal section. It has hitherto been the impression amongst practical surgeons, that a stricture which would allow even the smallest instrument to pass, might be cured by patience, and would not require the knife; but Professor Syme has attempted to overthrow this somewhat wholesome doctrine, and to rob the catheter of a great deal of its virtue, by substituting a plan of treatment, which must be considered as somewhat heroic.

We have no doubt that the means recommended by Professor Syme may be of use in certain cases; but we must confess, on reading the latter part of his work, which contains some observations on the efficacy of other plans of treatment, we were quite surprised at the manner in which he under-rates all other kinds of treatment. Treatment by dilatation. the use of caustic, and the ordinary operation of incision by perinæum, are each of them considered as unsatisfactory, or terribly abused by the author. He states, that the use of the bougie is totally unequal in many cases to bring about a lasting cure. We certainly are not surprised to find this instrument so useless in the hands of Mr. Syme, when we find him advise, that it "should not be allowed to remain in the urethra more than one or two seconds." Mr. Syme is a great authority, but we must beg to differ entirely from him on this important point. How can it be expected that a thickened and indurated stricture can be absorbed, if the bougie is not allowed to remain in the urethra for a much greater length of time?

The following is the Author's estimate of the value of the treatment by dilatation:—

"When carefully conducted, with due attention to all the precautions which have been mentioned, the process of dilatation frequently affords the most satisfactory results; but, except in cases which yield readily, it is still exposed to the following serious objections:—In the first place, it is attended with the risk of many untoward occurrences, which not only impede recovery, but complicate the patient's sufferings, and even endanger his life; secondly, it cannot be depended upon as a source of lasting relief; and thirdly, it is altogether inadequate to remedy that obstinate form of the disease in which the stricture has a resilent disposition to contract, accompanied with a great degree of irritability."—P. 47.

This certainly is dispiriting enough for those of us who are, and have been always inclined to trust to the bougie to a great extent for the cure of strictures. We have seen and had considerable success with the use of this instrument in the most troublesome cases; but we have never been contented with leaving the instrument in a stricture for one or two seconds only, and it is likely enough that Professor Syme would not be obliged to resort to the knife so often, if he were not to remain contented with keeping the instrument in for so short a time.

With regard to the application of caustic to a stricture, the Author heaps a load of abuse upon this particular plan of treatment. And in these observatious we are sorry to say we can too clearly see that unfortunate spirit of depreciating other modes of treatment differing from his own, which characterises the writings of Professor Syme. We are no great admirers of the plan of using caustic in stricture, (because, probably, we have not had sufficient experience of it,) but we truly believe that it is a mode of treatment well adapted to certain forms of this affection, and that it does not deserve the condemnation passed upon it by the Author. Mr. Syme must know well, that the advocates of caustic have given very favourable results in their published works. Why, then, should he throw out such an accusation against those who have used it, as is contained in the following passage:—

"On the whole, it seems more reasonable to conclude, that in the cases of alleged cure by caustic, there was no real stricture in existence, than to suppose that so improbable or rather impossible, an achievement had been accomplished."—P. 53.

This is rather too bad, to accuse the excellent surgeons who have used this remedy, not only of improper practice and of a complete ignorance of their subject, but even of dishonest motives. We are persuaded that the Author knows little about the proper use of caustic, and we would advise him, for the future, to make himself acquainted with his subject before he attempts to pass upon it such a sweeping denunciation. We would advise him, also, to be a little more charitable towards his brother surgeons, and to have a little more regard to the opinions of others who may be as honest and as good men as he is himself. Internal section of the stricture finds no favour in the sight of the Author; and he mentions two cases in which it had been tried with no benefit; but the occurrence of failure in one or two instances should not warrant a surgeon in giving such an unfavourable opinion, as is expressed in the following sentence:—

"But, while unnecessary and useless in those cases which admit of dilatation by the bougie, such an operation is not sufficient for counteracting the contractile tendency, when it exists in a more energetic form." P. 55.

We admit with the Author, that section of a stricture, whether internally or externally, is quite unnecessary and useless, in cases which can be cured by dilatation; but, the experience of other surgeons, which Professor Syme would only be doing a professional duty to respect, has shown, that in numerous instances of the worst forms of stricture internal section has cured the patients. Some credit surely should be attached to Stafford, Phillips, and Civiale, the first and last of whom have probably seen more of stricture than Mr. Syme has; and we would advise him to read the little work of M. Civiale, on "Urethrotomy," published this year, and reviewed by us a few months ago. He will there find the subject well considered, and will find evidence enough to prove that internal section will cure even the most inveterate forms of stricture; and Civiale distinctly states, that "a cutting instrument should not be used until other means have been found useless;" and the same authority gives the reason why internal section in some cases fails. He says, "it is in consequence of not dividing the whole of the indurated tissues forming the stricture, that he has observed incomplete cures."

We do not by this mean to speak of internal section as the best mode of dividing a stricture; on the contrary, we are not fond of the practice; but there can be little doubt that there are certain forms of stricture of a very obstinate nature, which may be cured by a skilful use of Stafford's instruments, and that internal section should not be condemned so summarily as it has been done by our Author.

Going on through the book, we come to his remarks on the usual operation of perinæal incision, and here again Mr. Syme deals out a heavy blow, and in his accustomed way. He somewhat boldly insinuates that those who use this operation are an

awkward set of fellows, who do not know how to use a catheter properly. Alas! for Astley Cooper, Liston, and Fergusson, you were and are mere bunglers, and should all of you have gone to learn catheterism from Professor Syme, Surgeon to the Royal Infirmary at Edinburgh. Hear what he says of this operation, and admire his consistency:—

"The operation by external incision, hitherto employed, has been resorted to as the refuge of awkwardness or failure in the introduction of instruments, there being no truly *impermeable* stricture, while the one now advocated can be accomplished only by steps requiring the nicest manipulations."

Yet a little further on, after having thus broadly insinuated that those who use this operation have done so only because they are too awkward with the catheter, he recommends it to a certain extent; but, mark, it is not to "be undertaken by any one who is not able to overcome the ordinary difficulties which are presented in the surgical treatment of the urethra!" Why, the fact is, if the surgeon were able to overcome the ordinary difficulties in a stricture, it would not be necessary to resort to section in any case, internal, external, or that recommended by the author; so that, according to this view of the matter, Professor Syme himself is unable to overcome the ordinary difficulties of a stricture of the urethra; otherwise, would he recommend a cutting operation at all?

A few observations on Perinæal Fistula, in which nothing beyond what we all know before will be found, complete the work before us. We have given this lengthened notice of it, because we think that the subject on which it treats is of very great importance. Mr. Syme has added another to his very many useful contributions to surgery, in this endeavour to improve the treatment of stricture; and we give him full credit for it. Still, we cannot shut our eyes to the manner in which some parts of this treatise are written, and that somewhat peculiar spirit in which he discusses and undervalues the doctrines and practice of others. Our criticism on these points may be severe, and some may think unjust; but the careful reader will too plainly see that Professor Syme has exposed himself to censure, in endeavouring to raise in estimation his own practice by depreciating that of others. We say, however, Read Mr. Syme's book, acquaint yourself with his mode of treatment; but still stick to the bougie and catheter as much as possible in your treatment of stricture.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, January 8, 1850.

Dr. ADDISON, President.

TWO CASES OF COMPLETE INTESTINAL OBSTRUCTION,

ARISING FROM DISEASE OF THE SIGMOID FLEXURE OF THE COLON AND THE RECTUM, IN WHICH THE DESCENDING COLON WAS SUCCESSFULLY OPENED IN THE LOIN.

By FREDERICK FIELD and JOSIAH CLARKSON, Esqrs.,
Members of the Royal College of Surgeons of England.
(Communicated by JOSEPH HODGSON, Esq., F.R.S.)

Mr. Field's Case.—On Monday 3rd, 1846, the author was requested to see J. R——, a coach-axle forger, aged 33, corpulent and muscular, and accustomed to drink largely of beer. He had always enjoyed good health until a year back, when he began to suffer from pain in the bowels, constipation, and tenesmus, his stools becoming scanty, and voided with difficulty. There was also some derangement of the functions of the stomach. Three months since all these symptoms became aggravated, and were relieved only temporarily by purgatives. He often vomited after his food; his stools were voided with more difficulty, being of a more fluid consistence, though he had not noticed any diminution in their diameter. Four days before the author's visit, the bowels had ceased to act, and all the symptoms became greatly aggravated. When seen, the abdomen was greatly distended and tympanitic; there were pain, tenderness, and some bulging over the transverse colon; the pain was paroxysmal, and accompanied by strong tenesmus; vomiting was almost incessant. Five grains of calomel and two grains of opium were ordered; to be followed by a black draught every four hours. On the following day, (May 4th,) the symptoms continued unabated; the urine was scanty and high-coloured. Prussic acid and castor oil were administered at distinct intervals, and the calomel and opium continued. Some relief to the pain and vomiting was thus procured. In the evening a purgative enema and warm bath were ordered; the injection was immediately returned, and not more than a pint could be thrown up. On the 5th of May, the colon-tube was passed up, but could not be introduced more than eight inches. Twelve ounces of blood were taken from the arm; larger doses of calomel and opium, croton oil, the cold douche, were successively tried, but without any relief from the bowels, or other than a temporary relief to the more urgent symptoms; galvanism was equally ineffective; still the patient's strength and spirits were sustained until the 15th, when they began to fail, and his countenance, tongue, and pulse betrayed a marked change for the worse; the matter ejected by vomiting had assumed a fæculent colour and smell. It was then determined that an operation was the only resource left, and this was accordingly performed. As the patient lay on his back or belly, no indication was observable of the seat of obstruction, for the abdomen was equally swollen on both sides, and no bulging was perceptible in either lumbar region, though percussion elicited a duller sound on the left than on the right side. The patient was extended on a bed with his face downwards, and a transverse incision was made in the left loin, commencing about two inches from the spine, and carried directly outwards for five inches and a half, about one finger's breadth above the crest of the ilium. The skin, fat, latissimus dorsi muscle, and quadratus lumborum were successively divided, and a shining membrane exposed. This last, which was mistaken for intestine, proved to be fascia, and, when divided, a large quantity of fat was brought into view, which was carefully cleared away, and the intestine at length exposed, at a considerable depth. Sutures were passed through it, to retain it in its position, and subsequently to affix it to the edges of the wound, and an incision was then made into it, to the extent of half an inch, which immediately gave exit to an immense quantity of light-coloured fluid fæces. Vomiting entirely ceased, and the patient was relieved of all his urgent symptoms. The opening in the bowel being fixed by sutures to the skin, a large bread poultice was placed over the wound, and the patient was enjoined to lie on his left side. Throughout the following night the evacuations continued abundant; the belly became soft and free from tenderness, and the general symptoms were still further relieved. On May 17th, the sutures had ulcerated from the intestine, which was adherent all around to the circumference of the wound. On the 18th, the wound was rather inactive; it was syringed with yeast mixed with warm water, and dressed with lint dipped in oil, the surrounding skin being smeared with cerate. Granulations subsequently sprang up, and with occasional variations and trifling drawbacks, he proceeded favourably, his health became ultimately re-established, and he was able to follow his former calling, which required great physical exertion. The only interruption to perfect health resulted from occasional constipation, caused, apparently, in a measure, by tendency to contraction of the artificial anus, which was remedied by the introduction of a bone glyster-pipe, and the injection of warm water; thus the passage was dilated, and the fæces were, at the same time, softened. This state of things continued until the latter part of 1847, when the patient was attacked with symptoms of hepatic disease; he lost his appetite, and became emaciated and ascitic, and ultimately died in February, 1848, one year and nine months from the time of the operation. On examination of the body, the peritoneum was found covered with lymph, the liver granular and thickened, and the kidneys congested. The stricture of the intestine was found to be in the sigmoid flexure of the colon, and was about four inches in length; this portion being filled by a plug of coagulated lymph. This plug became broken up and detached by maceration in spirit, leaving the intestinal tube continuous, though contracted and slightly thickened. The plug resembled the deposit which takes place in the larynx in acute laryngitis. The artificial opening was funnel-shaped, with its apex externally; the outer orifice was contracted to the size of a small goose-quill; it appeared to be lined by mucous membrane. The lower portion of the intestine was much contracted.

Mr. Clarkson's Case.—B. F., aged twenty-one, a robust and healthy-looking woman, applied to the author, in July, 1846, with symptoms of dyspepsia, the bowels not having been relieved during the preceding five days. She was ordered an aperient pill and draught. Two days afterwards she returned, the symptoms being still unrelieved, and bowels still constipated. A stronger aperient was administered, but still without relief. On the 22nd, (the bowels not having acted since the 14th,) she complained of pain in the umbilical and left hypochondriac regions; the abdomen was slightly distended and tympanitic, and pressure upon its parietes increased the pain. Constant nausea, but no vomiting; pulse, 110; urine copious. To take croton oil, half a drop, every second hour. On passing the colon tube, it could not be introduced further than six inches. Two pints of fluid were injected, and returned untinged by fœcal matter. The abdomen became more distended and tender; flatus moved about the bowels, and appeared to be arrested in the left iliac fossa. Leeches were twice applied, and some of Battley's solution of opium given; vomiting had commenced. Subsequently, the following expedients were tried, but in vain, to induce the bowels to act: large doses of opium, the cold douche, free injection of water into the rectum, and its retention by pressure, galvanism; and on the 26th, the symptoms becoming more urgent, an operation was undertaken, Mr. Hodgson concurring in the propriety of the step, and urging its immediate performance. The patient was laid on her belly, a pillow being placed under the abdomen, so as to raise it. An incision, five inches in length, was carried outwards from the edge of the erector spinæ muscle, about two fingers' breadth above the crest of the ilium; the quadratus lumborum and fascia were exposed and divided, and after some loose fat was removed the intestine was reached; four ligatures were passed through it, and fastened, two to the upper and two to the lower edge of the wound, and the bowel then divided longitudinally between them. A large quantity of fluid fœces at once escaped. The patient, who expressed herself relieved, was placed on her left side, in bed. The discharge continued very profuse, and a poultice was shortly after applied. On the following day, the symptoms were further relieved, and the distension of the belly had subsided, the escape of fœculent matter being abundant. From this time she steadily improved, and was able, after a time, to return to her usual household duties. Whenever the bowels became confined, aperient medicine, and an injection relieved her, but a tendency to contraction of the bowel gradually exhibited itself, which was, for a time, relieved by the use of bougies. This annoyance increased, and her health began to suffer seriously. After the expiration of ten months, the patient's appetite failed, digestion was impaired, and she suffered from more constant and severe pain. The artificial anus was further dilated with sponge tents, and subsequently with the scalpel; but the constipation and other symptoms were not relieved, and she vomited nearly all she took into the stomach. She died in September, 1847, having survived the operation nearly fourteen months. On examination of the body, the parietal peritoneum was found mottled, tubercular, and thickened; the opposed surfaces of the intestine were glued together, and to the liver, spleen, and stomach; these adhesions were very firm, and sufficient to have greatly interfered with the peristaltic action of the bowels. The small intestines were distended with fœces, but the transverse and descending colon were empty. The mucous membrane was ulcerated at several points; the obstruction was found to be about six inches from the anus, and on a level with the fundus of the uterus. It consisted of dense, cartilaginous substance, surrounding the intestine and completely obliterating the canal; it appeared to have originated externally, and pushed forward the fundus of the uterus, to which it adhered firmly. On section, the canal was found to be completely obliterated to the extent of half an inch. The edges of the artificial opening were rounded and smooth, and the neighbouring mucous membrane was healthy.

Mr. Hilton observed, that in all the cases in which this operation has been performed, all the usual remedies were employed in the first instance, but he was of opinion, that the earlier the operation was had recourse to, the greater the patient's chance of safety. In cases of obstruction in the large intes-

tines, there generally occurred an attack which lasted a few days, and then went off, the obstruction recurring from time to time until it proceeded so as to require the operation. Distension in the colon usually precedes vomiting, when the seat of the obstruction is in the large intestines. Local pain and a large secretion of urine are also symptomatic. He did not advocate the repeated use of purgatives, but, after one full dose had been given, would rely chiefly on opium. Mr. Hilton then alluded to several cases in which the operation had been necessary, and spoke of one in which he had operated, the patient surviving for seventeen days. With respect to the operation, with a view to open the colon without interfering with the peritoneum, he recommended a vertical incision, about three inches long, ending below, about half an inch above the crista ilii, parallel with, and a quarter of an inch distant from the erector spinæ. The quadratus lumborum would thus be exposed, and, by turning it aside, the colon would be in view. He had repeatedly tried this on the dead body, and even on the living, and always successfully. The pain and spasm complained of in one of the cases might depend on one of the lumbar nerves having been involved in the incision, and he suggested its division near its root as a means of relief.

Mr. Coulson narrated the case of a woman aged 34, who, when somewhat advanced in pregnancy, was attacked with symptoms of obstruction, which increased, and were soon accompanied by fœcal vomiting. The attack proved fatal on the ninth day. The examination after death showed that the obstruction was caused by a small fish-bone sticking in the rectum, which had been pressed on by the gravid uterus. The case is published in South's edition of "Chelius' Surgery," aad the preparation is in the College Museum. If, in this case, the operation had been performed, the patient's life might, perhaps, have been saved. In cases where the obstruction is caused by malignant disease, it becomes a question whether the operation is to be performed. He thought not, if it be complicated with disease in other organs; but if it be not so complicated, then the propriety of the operation must depend on the circumstances of each case respectively.

Mr. Hodgson thought with Mr. Hilton, that the operation was generally delayed too long; he knew of two cases, in which the delay caused a fatal termination, from exhaustion in the one, and peritonitis in the other. He also objected to the long-continued use of drastic cathartics, as being frequently injurious. There is no rule, however, as to the time when the operation should be performed; and he thought it must be decided by the circumstances of each case. In some cases of obstruction, small and repeated doses of castor-oil, with or without laudanum, had succeeded in removing it. Amussat's operation was an easy and safe one—there was nothing to be cut of importance. The fascia, which is encountered during the operation, had been mistaken for intestine more than once. On dividing it a quantity of loose fat is met with, and, until that has been found, the operator may be sure he has not reached the bowel, the distention of which, by the disease, facilitates the operation. The difficulty in the cases before the Society was met with after the operation, from the tendency of the artificial anus to contract; this, he thought might be obviated by a gutta-percha tube and shield. He was of opinion, that vomiting occurred earlier, when the obstruction existed in the small, than when the larger intestines were the seat of the disease. The history of the case, too, would aid in determining its seat. The operation in the loin was to be preferred to that in the iliac region, where there was a risk of fœcal infiltration. Mr. Hodgson then spoke of some cases of obstruction, in which the abdominal cavity had been opened, and the bowel relieved: two instances of this operation were successful, one by an English provincial surgeon, and the other by a Genevese. He considered that these cases, and the operations for ovariotomy, showed that opening the peritoneum was not so dangerous as had been supposed.

Mr. B. Phillips considered the operation in question to be one of great importance; but wished the profession to obtain better means of diagnosis than they possessed at present.

WESTMINSTER MEDICAL SOCIETY.

CASES AND OBSERVATIONS UPON THE TREATMENT OF SOME PRIMARY VENEREAL ULCERS NOT CURABLE BY MERCURY.

By BENJAMIN TRAVERS, Jun.,
Lately Resident Assistant-Surgeon and Teacher of Surgery at St. Thomas's Hospital, F.R.C.S., &c., &c.

The subject upon which I am about to offer a few remarks for the consideration of the Society would, at first sight, seem to be so hacknied and sterile as to demand some apology for its bare mention, but I believe, even now, that there are few professional topics more suggestive of inquiry and further discussion than the primary forms of venereal sore, and the treatment which they require, and certainly there never will arrive a time at which this department of our art can cease to be of grave importance, alike to the character of the surgeon and the well being of his patient. If we indulge in a retrospect, however cursory, of the practice and opinions of surgeons in this matter, I think it will be admitted, either that the primary disease has from time to time undergone material modifications, in obedience to improved habits of temperance and cleanliness, and the more judicious use of remedies, or that the constitution of many persons is insusceptible of the specific action of a poison formerly so easy of recognition in its early stages.

It is admitted that the Hunterian definition no longer applies in a great majority of cases, and it is not at present safe to assert, or fair to presume, that all forms of primary venereal sore require a mercurial course for their cure. It is true that this remedy is still generally employed or recommended in suspicious cases, and a contrary procedure is rather the exception than the rule, for few in this country care to incur the risk of secondary symptoms, which does always more or less attach to the non-mercurial plan. Still much patient inquiry has shown, that many primary sores do not require mercury for their cure, and that in some the healing process is actually retarded by its use; whilst of other instances it has been noticed, that although they do not require, or will not bear the local use of the specific, it is essential to the after well-being of the patient that the system should be subjected to its action. My object, in the few following remarks, is not to assert the conditions, nor yet define the bounds of these varied characters and actions of the disease; but rather to challenge the experience of my *con-frères*, as to the general truth of my proposition, with a view to a more precise diagnosis of those local appearances, some of which do, and some of which do not require mercury for their removal and cure. So entirely have we been guided of late by the effect of this remedy, that writers as well as practitioners will oftentimes not trust themselves to an assertion, that a disease is or is not venereal, nor will they hazard any intelligible definition of its nature, resting upon an opinion, the suggestion of implied experience, that mercury is or is not necessary for its eradication. This empirical teaching of the remedy, is no doubt practically a safer guide than the bare guess-work arising from isolated observations. Still we should seek a higher standard of intelligence on these occasions, and I am hopeful of its eventual discovery. For myself, I do not profess to believe in more than one type of lues; but its forms I have found, as I had been led to expect from the observation of others, infinitely varied. It is in evidence, that from the same source of contamination one may contract a clap,—a second primary sores, whilst a third escapes altogether. A married man, aged 50, cohabited with a kept woman, who certainly exhibited no symptom of disease, during the temporary absence of his wife. On the return of the latter, and a resumption of his lawful habits of intercourse, still occasionally visiting the other party, he contracted first a gonorrhœa, and then sores, requiring mercury for their cure. At this juncture, abstinence was enforced as a matter of necessity; but I never could discover, on the strictest inquiry, that either of the women were unclean or injuriously affected, although both were of course bitterly incensed on a discovery of the real state of affairs. (a) The foreign seamen in this town inoculate our women with venereal phagedæna in its worst form, and we have it on authority, that, in the Peninsula, the native women communicated a disease showing itself in frightful ulcers upon the genitals of our men and officers; yet, at the same time, these people themselves had not been incapacitated from labour in their ordinary avocations, and they were cured by methods which we should deem worse than trivial under the circumstances. (*Vide* "Mr. Ferguson's Report in the 4th Vol. of Medico-Chirurgical Transactions.") I mention these facts, coupled with the varieties of venereal sore in its milder aspects, to point to the constitutional susceptibility of the individual as contributing largely to the particular form of syphilitic ulceration, and if this be so, surely such a truth cannot be too often or too powerfully impressed upon the mind of the surgeon. Such impressions, however, and the influence which they may be supposed to exert upon the mode of treatment ought not, I apprehend, to bias our conclusion as to the existence of a poison, or the real nature of the venereal disease; and it is desirable to lay a particular stress upon this remark, because it has happened more than once, that an over-anxious and too exclusive notice of the constitutional tendencies of the individual, as evidenced by the aspect and progress of a local sore, has operated to bewilder and mislead the practitioner in a manner very prejudicial to the recovery of the patient. Mercury has, under such circumstances, been abruptly stopped, or given in so gentle a manner as never to have produced its proper effects, not having passed the bounds of an irritation, which, when unsubdued, tends to exasperate and promote that which it was meant to annihilate. This over-curious observation of a particular to the neglect or forgetfulness of a great principle, has too often led to that dabbling with a remedy, which, like a two-edged weapon, cuts both ways, and must be handled with skill and resolution not to do incalculable mischief. Of the many instances in which mercury either does no good, or operates as a noxious irritant, and retards convalescence, it still remains, I think, to be determined whether the peculiarity is due to idiosyncracy alone, or whether the perverted action belongs in part to individual temperament, and in part to the remedial agent operating upon a poisoned system. It is not my aim, on the present occasion, to raise the vexed question of a mercurial or a non-mercurial plan of treatment on all occasions, but rather to ask the Society, whether our collective experience has arrived at anything like a certain rule whereby we may be emboldened to say that under certain circumstances this remedy may and ought to be withheld. It should be borne in mind, that what I am proposing for consideration is an exception, whilst, however, I admit that its occurrence is by no means uncommon; hence, indeed, arises the value of the inquiry. This question must often have suggested itself to all of us, and it has recently recurred forcibly to my mind in the conduct of the following case. A young man, in the employment of a large house of business as shopman, had been under treatment since May, 1849, for a superficial spreading ulcer of the glans penis, covering its sides and apex, and nearly surrounding the orifice of the urethra. It was seen by a surgeon about ten days after connexion, and the part was at that time much swollen. I first saw the case on 8th of November. At this time the edges of the sore were raised and irregular, its surface being smeared with a greasy secretion; it was deeper in some parts than in others; there was no promise of cicatrization, but at the same time it was indisposed to spread rapidly. The patient was sallow, of small stature, pulse irritable, tongue clean, bowels acting regularly, appetite unimpaired, rest at night uncertain. He was becoming anxious from a long continuance of the disease, but was not constitutionally ill. As to remedies, mercury had been given internally, and the blue ointment had been diligently rubbed into his surface; the hydriodate of potash had also been used perseveringly, but all without the slightest local improvement, or affecting the mouth in the smallest degree. The history of the case and the character of the sore alike impressed me with a belief, that the disease must, in spite of bygones, require mercury for its cure. I took exception to the circumstance of the system never having shown any sign of its presence, and I said to the gentleman who introduced me to the case, "We must still make this young man's mouth sore, and then he will get well." We succeeded in affecting the gums, by the diligent use of the plummer's pill, in about three weeks. At first we applied black wash, with a little mucilage, and a scruple of powdered opium, dissolved in a six ounce mixture, to the part; the surface now looked cleaner, and became quite level, but no more. We next determined upon maintaining the

(a) It may be said, that this gentleman indulged with other women. I can only offer, in answer to such an objection, his solemn asseveration to the contrary, and his personal conviction, that his friend was sound. My father relates a precisely similar case, with this difference, that, on that occasion, the wife eventually suffered from skin blotches and sore throat, and mercury was successfully employed for their removal.

mercurial action, by giving the pill at night often enough to keep the gums tender, put cold water upon the ulcers, and gave one drop of the nitric acid, two of the muriatic acid, with some liquorice and poppy syrup in water twice a day. Still the result was unsatisfactory. There was an appearance of skinning upon one margin of the ulcer, but then it was less clean and wider in an opposite direction. Under these circumstances, the mercury was wholly withdrawn. Ten drops of the tra. ferri muriatis were ordered twice a day, with directions to persist in the cold water dressing. The ulcer now for the first time assumed a healthy aspect, the healing process was slow, but uninterrupted, and the patient, latterly much dejected, became heartwhole and well. He has now been convalescent for some weeks, and as yet no secondary symptoms have shown themselves. Nor do I anticipate their approach. On two occasions after the mercury had been withdrawn the sore was touched with the nitrate of silver, and with the best effect. Some years ago a young gentleman of delicate habit showed me some ragged, spreading, preputial sores, contracted in the ordinary manner, which, as in the foregoing case, were made neither better nor worse by mercury. I never succeeded in salivating him, but on that occasion I resorted at last to full doses of the sulphate of quinine, along with a cold-water dressing; these, with a trip to the sea coast, cured him completely in three weeks. He has never suffered from secondary symptoms. In another case, where the primary sore was healed under precisely similar circumstances, mercury having previously proved not otherwise prejudicial than as being altogether unavailing, the party remained well for some years; but I hear that he has recently been compelled to quit business, in consequence of impaired health, and that he has been the subject of penetrating local ulcers and glandular swellings. In this case mercury was given for a short time only, in the form of calomel and opium at night. The party, aged twenty or thereabouts, at the period of his first illness, was stout and fresh coloured, but his circulation was feeble, and there was some reason to suspect the presence of struma in the habit. In the practice of the hospital, I remember formerly to have dealt with the disease on precisely similar terms, in its primary form, and with the like results, after mercury had failed in its effect. In the face of these statements, I must still profess myself an advocate for the use of mercury as the general rule; but I know, from experience, that, in certain cases, its exhibition is, to say the least of it, only so much time lost. What, then, are the circumstances which justify hesitation, or rather warn us to abstain from this "panacea," on certain occasions? The sores contracted by impure intercourse are typical of one and the same poison, but people now-a-days are certainly not all alike as regards the remedy. For myself, I believe, that in these anomalous cases the explanation turns largely upon a latent peculiarity of constitution, a distinction which for the present we must be content to arrive at chiefly through the teaching of the medicinal agent; but, as I have before said, I look for another and an earlier, if not a better guide. Some indication to be drawn, at the first glance, from the aspect of the local disorders, and an estimate of the powers of the patient,—a result which implies lengthened and careful investigation. It is reasonable to suppose that the action of so powerful an evacuant as mercury,—to say nothing of the incidental aids of an advanced and mature civilisation,—have insensibly modified and very materially weakened the force of the venereal virus; but to my mind, it is not enough to say that struma is present in these cases, for many scrofulous subjects bear the moderate action of mercury very well, and so we may say of scurvy or gout. I am not aware that these offer any immunity from lues, or hinder the action of medicines directed for its cure. But, be this as it may, when parties do present themselves who, being poxed, are found to be inaccessible to the action of mercury, the sooner the discovery is made the better; and it is satisfactory to know that they may be cured upon other terms, and that, as a general rule, they do not suffer from secondary symptoms. I cannot bring this little summary of my observations in this matter to a conclusion without referring to the case of inadequate mercurialization, wherein the system becomes impaired and eventually succumbs, under the wasting effects of the medicine on the one hand, added to the uncontrolled progress of the disease on the other. Even in our own day one sees cases occasionally (and a most melancholy one has recently come under my notice), which prove the necessity of a constant singleness and steadiness of purpose in the exhibition of mercury for the eradication of lues. Let it be administered to salivation with the fixed intention of extinguishing the disease, or let it be wholly omitted. It is not without suspicion one hears of such terms as the stimulant or alterative action of mercury, as applied to the use of this remedy for the cure of syphilis. The multifarious and hybrid disorders so engendered would seem to bear out the non-mercurialist in all his objections, if it does not render his triumph complete; but I submit, that nobody who has ever watched the effect of the only remedy capable of summarily stopping the course of some phagedænic ulcers of the genitals, can ever afterwards doubt its efficacy, or hesitate as to its employment for the cure of primary sores, the history and activity of which justify present apprehension, to say nothing of a reasonable fear, that the party so visited will, after the usual interval, suffer from secondary symptoms, unless they are averted by a mercurial course.

CORRESPONDENCE.

MEDICAL REFORM.

[To the Editor of the Medical Times.]

SIR,—As the time approaches when another spasmodic attempt will probably be made to obtain the passing of a Medical Reform and Registration Bill, perhaps you will allow the following suggestions upon the subject to appear in your pages.

Hitherto the members of the Profession have made no systematic and combined effort to elucidate the principles upon which medical reform should be based. The history of the question has for the most part presented a succession of paltry squabbles and manœuvres arising from the attempts of certain bodies to obtain or keep for themselves a monopoly of special privileges; and in the discussions which have, from time to time, taken place upon the subject the great mass of the Profession have had no good opportunity of recording the ideas and suggestions which their experience may have given rise to. When the Anti-Slavery Society undertook its agitation in favour of negro freedom, one of its most important acts was to establish a Paper devoted exclusively to that subject, in order to concentrate all available information regarding it; the Anti-Corn-law League likewise had its Paper for the promotion of the one object, that of free-trade, and the authors of the Freehold Land Societies' Agitation are about, it seems, taking a similar step. Now, it appears to me, that the medical reformers would act wisely in imitating their example, and establishing a small Paper to be devoted exclusively to their question. It may be published at first monthly, and afterwards bi-monthly, or from the commencement bi-monthly; and be continued for a year, and medical men throughout the country should be invited to contribute to its columns any suggestions that may occur to them as likely to be of service in drawing up a fair, practical, and comprehensive Medical Reform Bill. As many of the suggestions would, of course, meet with objectors, we should have the advantage of having them critically discussed, and thus be better able to estimate their relative value, while, at the same time, we should get at the sense of the Profession upon the question in a more effectual manner than seems likely to be done by any other means. In order that this Paper should have a free and wide circulation, it would be better for it to be conducted by parties who have no direct interest in any of the existing weekly medical Journals. It should contain in one or more of its numbers a full account of all laws and regulations affecting the Profession in other countries, and at the end of the half year or of each quarter a Supplement might be published, containing in opposite columns, and in a concise manner, a summary of the different suggestions that had been offered, and the objections with which each had been met.

If this plan be fairly carried out, the result will, most probably, be a Medical Reform Bill, which will serve as a model to other countries; while, on the other hand, any measure passed in the present unsatisfactory state of the question, will, in all likelihood, prove to be a bungled, ill-considered one, itself needing to be reformed and amended in less than half-a-dozen years. There are several questions which will require full discussion and careful consideration before legislating upon them. Three we may specify. First. Whether it is to the advantage of the Profession, that there should be so large, and apparently increasing, a number of diploma factories scattered about the United Kingdom; or whether it would not be preferable to have one central Examining Board for the whole Kingdom, or one for Great Britain, and another for Ireland. Secondly. Whether it would not be better to have, in future, but one course of studies, and one title, that of Doctor of Medicine and Surgery, leaving each man to adopt that branch of the Profession for which his tastes and talents qualify him; thus rendering the medical body a more consolidated one than it is likely to be while there are three grades. Thirdly. Are uneducated and unlicensed persons to have full liberty to attempt, *for gain*, the cure of diseases; or should some checks be imposed upon them, and of what nature should those checks be. These and other questions will be more likely to receive a thorough analysis in the pages of a journal similar to that here proposed, than they could possibly have through the examination of witnesses before a Committee of the House of Commons.

The adoption of the course recommended in this letter will, doubtless, delay for another session or two the passing of a law regulating the practice of medicine; but there is every reason to expect that we shall then be rewarded for our patience by having a creditable Bill, based upon broad and enduring principles; and considering the importance of the object to be attained, we may well, after having waited so many years, consent to wait yet one more, or, if necessary, even two. As Members of Parliament have been sufficiently plagued during several years with abortive attempts at Medical Reform Bills, I would recommend that between the present period, and the drawing up of such a Bill as that now advocated, all mention of medical matters in the House of Commons should be discouraged, in order that, when the proper time arrives, its members should come to the discussion of the Bill with minds not wearied of the subject.

In conclusion, let me again draw attention to the difference between the method already tried for concocting a Medical Reform Bill, and that now suggested. In the first case, we have only the evidence of men connected with the existing Medical Corporations, and of a few others called "eminent," and standing apart from the rest of the Profession, both of which parties are likely to be biassed by their peculiar positions, while the jury empanelled to receive and weigh the evidence thus given, is composed entirely of men perfectly unversed in medical matters, and not in a situation to be conversant with the wants and interests of the Profession. By the second method any man, no matter what his position in the great body of the Profession, would have it in his power to make any suggestions which seemed to him good, and the jury who would test them would be composed of medical men of all grades, who would act as checks upon each other in sifting the different suggestions.

I am, Sir, your obedient servant,

GEORGE FEARON, M.D.

Birmingham, January, 1850.

P.S.—Should such an organ of Medical Reform be established, I shall be happy to contribute, if needful, a small donation towards its expenses, and to aid it in any other way that I can.

[The subject of our Correspondent's letter has frequently come under the consideration of medical politicians, but has not been persevered with, as, from the limited number of readers in the Profession, and especially of those who take sufficient interest in Medical Reform to patronise a Journal exclusively devoted to the question, it has been found, that the sale would never cover the expenses. So far as the discussion of all vital questions is concerned, our pages are open to it, and we invite Correspondents to communicate to us their ideas upon the critical points that bear upon sectional or general interests. It would be as easy to draw up a plan based upon abstract principles, as to frame a new Constitution for a new French Republic; but what the Profession desires is, a thorough practical handling of all the interests of the Profession in relation to existing institutions, and this object we are prepared to aid and to carry out to the uttermost. Free discussion is the life of truth, and just principles can only be discovered and exhibited by and in its light. —ED. *Med. Times.*]

THE MANCHESTER MEDICAL REFORM COMMITTEE.

[To the Editor of the Medical Times.]

SIR,—I am directed by the Committee to forward you the enclosed copy of a Memorial sent by them to the President of the Royal College of Surgeons of

England, and to request you to insert it in the next Number of your periodical.

I remain, Sir, your obedient Servant,
GEORGE BOWNEY, Hon. Sec.

"TO THE PRESIDENT OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

"SIR,—In conformity with a resolution passed by the Manchester Medical Reform Committee, I beg respectfully to convey through you, to the Council of the College, the high satisfaction they feel at the announcement of an intention, on the part of its Council, to apply to the Crown for an amended Charter.

"In reflecting upon the probable details of such Charter, it has appeared to the Manchester Committee, after much and anxious deliberation, that a measure which shall embrace the following provisions would be generally acceptable to the Profession:—

"1. That upon the grant of a new Charter, all existing Members of the College who have attained, or may hereafter attain a standing of fifteen years, shall, upon the recommendation of six Fellows, be elected to the Fellowship without the payment of any fee, provided that the candidate do not openly trade in medicines.

"2. That Fellows of the College practising midwifery shall be eligible to the Council, but that Fellows engaged in the practice of pharmacy be thereby disqualified.

"3. That Fellows residing in the provinces be eligible to the Council, but that two-thirds, at the least, of that body shall be resident in London.

"4. That in the election of the Council the Fellows shall have the privilege of voting by proxy.

"5. That after the grant of the Charter the admission to the Fellowship shall be by examination, and every candidate shall have previously been admitted a Member of the College.

"6. That the Council of the College shall be empowered by the Charter to appoint Examiners in all departments of Medical and Surgical Science, and that the Board so constituted shall be formed independently of, or conjointly with the Examiners of the Royal College of Physicians or the University of London.

"I have the honour to be,
"Your obedient Servant,
"W. WATSON BEEVER, Chairman.
"Manchester, Jan. 11, 1850."

ON THE INJURIES WHICH THE HABIT OF SMOKING TOBACCO IS SUPPOSED TO CAUSE TO THE TEETH.

[To the Editor of the Medical Times.]

SIR,—I have seen in your last Number a communication from Mr. Levison, in which he details the injuries he supposes to arise to the teeth and digestive organs from the smoking of tobacco. He believes that the fangs of the teeth, after a time, become denuded of their periosteum by the conjoined actions of the heat of the smoke and excessive acidity of the saliva secreted when the digestive organs are deranged by the habit of smoking. It is easy to perceive, by the tenor of the communication, that Mr. Levison is not addicted to the use of the "charming weed." Now, Sir, as I have been in the habit of smoking some little time, I am personally interested in the subject; as yet, no evil whatever has resulted to my teeth, and I have made inquiries among my smoking friends, with a view of ascertaining if they had experienced the general sensation of aching and throbbing to which Mr. Levison refers. All of them assure me that they suffer no inconvenience of the sort, although some of them carry it to such an extent as to make a point of smoking before breakfast, and all have been addicted to its use for years.

Under these circumstances, I cannot but be surprised that none of them should have been troubled by the ill effects referred to; and think it possible that some other reason might be found which would have caused the inconveniences recorded; such, for instance, as the use or abuse of mercury. I have seen the symptoms in persons who have never smoked at all; and a friend informs me that he has seen the edges of the teeth worn away by the friction of the clay pipe, in the lower classes, without their being otherwise injured.

I, therefore, think, that tobacco can plead "Not Guilty" of the charges brought against it.

I am, Sir, your obedient Servant,
WALTER RALEIGH.

DETECTION OF LEAD, IN MINUTE QUANTITIES, IN WATER, OR OTHER FLUIDS.

[To the Editor of the Medical Times.]

SIR,—Hydrosulphuric acid, (sulphuretted hydrogen,) or, preferably, a solution of hydrosulphuret of potassa, is considered the best and most sensitive test of the presence of lead in water; but there is great difficulty in estimating the amount actually present, unless it be in sufficient quantity as to be capable of being collected and weighed. The following method was adopted by me last week in testing a water supposed to contain lead, and proved to do so; and, although not, strictly speaking, correct, is, nevertheless, as great an approximation to truth and accuracy as can well be conceived, and sufficiently near for all practical purposes. Suppose we take a half-pint tumblerful of the suspected water, and add from 1 to 3 or 4 drops of a solution of hydrosulphuret of potassa; if lead be present in large quantity, it will be immediately precipitated in black flocculi; but, if small, there will be no precipitate, but the liquid will be more or less discoloured of a dirty brown.

Having, in the above experiment, sought for and discovered lead by means of the hydrosulphuret, we now, as a comparative and confirmatory experiment, reverse the order of testing, by using a solution of acetate of lead of known strength. For instance, make a test liquor by dissolving in 12½ ounces, or 100 drachms fluid, of distilled water, 1 grain of acetate of lead; take another half-pint tumblerful of distilled water, and add from 1 to 3 or 4 drops of the hydrosulphuret of potassa solution, and place both vessels in strong light, with a piece of white paper at their backs; then, with a graduated syringe measure, or a nicely stoppered drachm vial filled with the test liquor made with lead, drop in so much as will bring up the colour to the required depth of shade as that of the original water under examination, every drop of this test liquor answering to 1-6000th of a grain of lead salt. This method of testing, it will be perceived, applies to other substances besides lead.

JOHN HORSLEY.

Ryde, Isle of Wight, Jan. 9.

A USEFUL REMEDY FOR CHILBLAINS AND TOOTH-ACHE.

[To the Editor of the Medical Times.]

SIR,—At this season few diseases are so general as chilblains, and the plans that are generally employed for their removal are seldom attended with more than very slight advantage to the sufferers.

It is a disease that attacks most generally females and delicate children, and those of a languid circulation.

The very numerous and various medicines which have been from time to time employed, prove very clearly that no very effective or successful plan of treatment has hitherto been found. Such is the present state of treatment, both of chilblains and tooth-ache.

My plan of treatment is simply to saturate a piece of sponge or flannel with the concentrated tincture of capsicum, and to rub well over the seat of the chilblains until such time as a strong tingling and electrical feeling is produced.

This medicine possesses an extraordinary power in removing congestion, by its action upon the nerves and circulation.

This application ought to be continued daily until the disease is removed; relief will be experienced on the very first application, and frequently there will be a total removal of the disease after the second or third; this, of course, depends upon the severity of the case.

This embrocation, when rubbed, never produces excoriation if the skin is not broken.

The manner of using it for tooth-ache is by putting a drop or two of the tincture on cotton, and applying it to the part affected; the relief will be immediate.

The following is the formulæ:—Tinctura capsici concentrati, ℞ Capsici Baccarum, ʒiv.; Spiritus Vini Rect., ʒxij. Macera per dies septem et cola. (It may also be made with advantage by displacement.)

I remain, Sir, your obedient servant,
A. TURNBULL, M.D.

16, Manchester-square, Jan. 17, 1850.

EXCISION OF THE HEAD OF THE FEMUR.

[To the Editor of the Medical Times.]

SIR,—I am sure that all those who are interested in the advance of sound surgical knowledge, must have read with much pleasure the account of the successful operation of excision of the head of the femur, by Mr. Morris, of Spalding, to whom great credit is due for having turned out of the old beaten path, and who, by acting upon the principles laid down by Professor Fergusson, cured his patient of a formidable disease and restored him to health and comfort.

As Mr. Morris has so kindly mentioned my name in connexion with this case, I think it my duty to corroborate what he has said regarding the patient's present condition. Through that gentleman's courtesy I had the opportunity of seeing the case, and I unhesitatingly affirm, that the result which has taken place is far beyond that which we could be possibly led to expect.

My object, however, in addressing you, is to refer to a point of very great importance in connexion with this operation, one which has strongly attracted my attention. I am speaking in reference to the mode of proceeding adopted by Mr. Morris.

It appears, that on cutting down upon the joint he found the head of the femur still within the acetabulum, and that he first sawed through below the great trochanter, and then dislocated the head of the bone, not, however, without finding it a difficult matter, in consequence of the edges of the cotyloid easily overlapping it.

I would strongly recommend any one who performs this operation to disengage the head of the bone as far as possible from its surrounding connexions first, before making the section; for, if the bone be not sawn through the operator has the advantage of the thigh as a powerful lever in the hands of a good assistant; the head of the femur may be thrust well out of the wound, and the remaining steps of the operation will be easily accomplished. But if the section be first made, and the head of the femur be either in its socket, or strongly connected to the neighbouring tissues, the difficulties may be great, for the leverage of the thigh is lost, and the surgeon has little use for his left hand. In certain instances similar to that of Mr. Morris, where the head of the bone is still in the socket, flattened, cut, and overlapped by the edges of the cotyloid cavity, it might almost be impossible to get it away. Whereas, the limb being well carried inwards by a strong assistant, (the neck of the bone not being sawn through,) the whole proceeding is much facilitated; and any one who will take the trouble to operate on each side of the dead body, in these two ways, will subscribe to the justice of this remark. I am sure Mr. Morris will excuse my referring to this point, which I am persuaded is one of very great importance, and worthy of the attention of those who have not had the opportunity of performing this operation.

This interesting case teaches us much. Mr. Morris has the satisfaction of showing to the Profession, *for the first time*, that the head of the thigh-bone may be disarticulated from its socket, in cases of the hip-joint, and be recovered with perfect success. Hitherto Professor Fergusson has only recommended the adoption of this proceeding, when the head of the bone was dislocated; and it has appeared to me that, were the operation put in force when the head of the femur was still lying in a carious condition within the acetabulum, the result would be anything but satisfactory; still here is practical proof to the contrary, which must cause me at least to change my opinion on this matter. Still I am glad to see that Mr. Morris would not advise the operation, unless one was tolerably certain that dislocation exists.

It must be admitted, I think, that this case speaks volumes in favour of this proceeding; for, if a successful result can be obtained under such difficult circumstances as were here present, how much more likely is it that a favourable issue will be brought about when the head of the bone is out of the socket; and this latter has had the opportunity of recovering itself from the morbid action it has probably undergone.

Mr. Morris might well have dwelt upon some of the circumstances of this case, as showing the fallacy of Professor Symes' views respecting that disease, and the operation of excision of the head of the femur. How clearly does it overthrow that Professor's doctrine, that the acetabulum is always diseased with the head of the bone! And how signally does it aid in utterly confounding his assumption of the impropriety and uselessness of this operation!!

It is pleasing to see that the surgeons of England are not deterred by this authority from a laudable attempt to relieve human misery, and add to the triumphs of their art; and it must be gratifying to my old teacher to find his doctrines so well and successfully carried out; and it is no less pleasing to

myself to find that my humble efforts to disseminate and defend those doctrines, which I am more and more convinced are correct, have not been entirely unavailing, notwithstanding the strong opposition they have encountered.

I am, yours obediently,

HENRY SMITH.

13, Caroline-street, Bedford-square.

HEALTH OF THE SOLDIER.—HIGHLAND DRESS.

[To the Editor of the Medical Times.]

SIR,—In the *Stirling Observer*, of January 17, the following occurs, which, as it has in view the comfort and health of a gallant part of Her Majesty's army may not unsuitably occupy a small portion of the *Medical Times*. The remarks of the Editor, we conceive, are in the best spirit, and, it is hoped, will meet, in the proper quarter, with the attention they deserve, backed, as they already are, or appear to be, by the present Assistant Adjutant-General for Scotland:—"We are glad to learn, that, on Monday last, Colonel Eden, Assistant Adjutant-General for Scotland, arrived in our town with the intention of instituting certain inquiries concerning the uncomfortable nature of the Highland dress worn by the 93rd regiment now garrisoning our castle, and the conclusion is, that henceforth, in winter weather, when the men mount guard, they are to be dressed in the trews, and not in the kilt as heretofore. This is so far an improvement, and perhaps is as much as might be expected in a system so complicated as the military system, and when no one, without the consent, and even the direct orders of the highest Powers at the Horse Guards would undertake the responsibility of introducing a change in dress, even though the ordinary dictates of nature tell every man that the Highland dress, in weather like the present, (the thermometer ranging from 7 deg. to 31 deg. of Fahrenheit,) cannot but be productive of the utmost discomfort in the strongest men, and the precursor of disease, less or more inveterate, in others. . . . . In the natural world, those animals which are formed to live in cold climates have always provided for them a different and much warmer clothing during winter than that which they are found to possess in the heat of summer." The present distinguished and veteran chief of the Army Medical Department is himself a *Celt*, and no one can be better qualified, from long experience and scientific knowledge, aided as these must be by the *statistics* of the health of the Highland Regiments, to pronounce an opinion, and give advice on this important subject, to the authorities under whose charge these matters are.

AN OLD PENINSULAR.

Banks of Lochleven, Jan. 19, 1850.

MR. CHUBB IN REPLY TO MR. McCLURE.

[To the Editor of the Medical Times.]

SIR,—On Mr. McClure's letter, which appeared in your paper of Saturday last, I desire to make a few observations, which, I trust, will be the means of setting at rest the matter at issue between us. With regard to that part of his letter which has allusion to the supply of water at Torpoint, he says, that I gave you to understand, by my writing, that we had an abundant supply of water. How Mr. McClure, or any other person can infer that from my letters, it is beyond my power to discover; for the very words I used are calculated to convey the opposite impression. All I said was, that Mr. McClure's picture was overdrawn; and so I still consider it, for he called the water deleterious and unwholesome; and such, during my residence here, I never remember it to have been. But, as I consider this part of the letter quite secondary, I wish to say a few words about the epidemic outbreak of cholera in this place, which I consider the primary and important matter; and, as Mr. McClure does not appear inclined to take my word for it, I will now give you a proof that he is not a very faithful reporter; and that he is usurping to himself (by his writing so much in the first person) credit which is not his due. It may all be summed up in a short space. The whole gist of the matter lies in this. Was epidemic cholera in Torpoint on the decline or not at the time of Mr. McClure's arrival among us? That gentleman appears to imagine, from his letter, that, because we had many cases of cholera and diarrhœa after he came here, the disease could not possibly be declining. At the time he arrived, and for some days before that period, the cases of cholera were fewer in number, less severe, and less fatal. But the best proof, perhaps, I can give you, is the very document from which Mr. McClure made a quotation in his last letter; but, I conclude, he did not give you the whole of it, as it would not suit his purpose. I allude to our worthy incumbent's report of the mortality during the whole period of the prevalence of cholera in this place:—

	Deaths.			Deaths.
August 13	.. 2	..	August 30	.. 2
„ 16	.. 1	..	„ 31	.. 2
„ 17	.. 2	..	Sept. 1	.. 2
„ 18	.. 2	..	„ 2	.. 2
„ 19	.. 1	..	„ 4	.. 1
„ 21	.. 1	..	„ 5	.. 1
„ 23	.. 1	..	„ 6	.. 1
„ 24	.. 1	..	„ 7	.. 1
„ 26	.. 1	..	„ 9	.. 1
„ 27	.. 3	..	„ 10	.. 1
„ 28	.. 3	..	„ 11	.. 1
„ 29	.. 3	..	„ 14	.. 1

Now, Sir, from this Report, it is quite clear that the disease had begun to decline some days before his arrival in Torpoint; that it continued to decrease steadily and slowly, but decidedly; and that I was quite right in using the expression which I did, that at the time of Mr. McClure's arrival the number of deaths had diminished down to *about one daily*. There is one point in his last letter at which I am rather surprised, and it is, that he says, it was not intended by him that his paper should make its appearance worded as it is; but this is scarcely reconcilable with the fact of his having written to you for a proof sheet before it was published, which, in your notices to Correspondents, was stated to be the case. Mr. M'Clure is an assistant-surgeon in Her Majesty's navy of only twelve months' standing; and it is to be hoped, that by-and-by he will be a more accurate reporter, for had his statements on this occasion been truthful, it would have saved a great amount of trouble and annoyance; or, had he shown me his Report before its publication, it would, I think, have been wiser and more courteous, seeing that he was writing a medical statement about a place of which I am the only medical man. A man ought to be very careful as to the accuracy of his facts before he appears in print.

I remain, Sir, yours truly,

CHARLES W. CHUBB.

Torpoint, January 23, 1850.

DEATH OF M. PRUS.—This distinguished Member of the French Academy of Medicine died last week from a pulmonary affection, brought on by excessive fatigue in discharge of his official duties in Egypt. Although M. Prus's connexion with Medicine was in some measure accidental,—for he was originally destined for the law,—he devoted himself with ardour to his profession, of which he soon became a bright ornament. Having been present at many of the grand battles of the Empire, he attracted the attention of Larrey. He settled in Paris about the year 1827, and was soon elected Member of the Academy of Medicine. M. Prus was the author of several excellent works, amongst which we may distinguish his treatises "On Cancer of the Stomach," and "On the Diseases of Old People," but his chief title to our respect is derived from his labours on the subject of the plague. He was one of the chief means of effecting important reforms in the quarantine laws; and when the French Government, yielding to the suggestions of the Academy of Medicine, instituted the Oriental Commission, M. Prus was naturally placed at the head of that body, and took up his residence in Egypt. There his whole attention was directed to the difficult task of eradicating the causes of plague. His last illness was brought on by excessive fatigue in Upper Egypt. In his last words he lamented that Providence had not been pleased to grant him one or two more years to complete the reforms which he had begun so well. *Sit tibi*,—may the earth lie lightly over him.

MR. ABURROW, the manager of the Liverpool Apothecaries' Company, has had a handsome piece of plate presented to him by the persons in the employ of the company.

STEEL-RIBBED UMBRELLAS.—A Correspondent of the *Liverpool Mercury*, states, that while walking with a friend, and protecting themselves from the rain with a steel-ribbed umbrella, he suddenly felt a shock like that of electricity, and became enveloped in a blue flame. He was bewildered for a second or two, and, then heard a thunder-clap. He had been struck by lightning, attracted, doubtlessly, by the steel in his umbrella. His friend did not feel anything, but saw the flame. When he got home he examined his watch, and found it had changed to a copper colour.

HEALTH OF LONDON DURING THE WEEK ENDING JAN. 19.

In the week ending last Saturday, 1156 deaths were registered in the Metropolitan districts; the average for ten corresponding weeks of previous years (1840-9) is 1125, which, if a correction be made for increase of population, becomes 1227. The lowest number in the ten weeks was 916 in 1840; the highest was 1401 in 1848. Though the rate of mortality has much increased since December, and the present return shows an increase of nearly 100 on the previous week, the deaths are still less than the average by 71. To the coldness of the weather may be chiefly ascribed the increase of mortality which recent returns have exhibited. In the last three weeks the deaths from phthisis, or consumption, have been respectively 129, 140, and 157 (the corrected average for last week being 146); from bronchitis, 103, 120, and 131 (the average being 73); from asthma, 19, 35, and 27 (the average being 52); and from pneumonia, 95, 83, and 85, whilst the average is 117. Of the 85 persons (comparatively few) who died, last week, from pneumonia, 60 were children; but of the 131 who died from bronchitis, which much exceeds the average, by far the larger proportion were persons of advanced age. Epidemic diseases continue to be less fatal than usual, except measles, which is rather more than the average. This disease ranged, in the corresponding weeks of ten previous years, from 8 to 51.

The deaths in the several hospitals of London occurred as follow:—

Kensington House Asylum	0	St. Bartholomew... ...	16
Lock	0	Miles' Lunatic Asylum...	0
Consumption, Brompton	2	Warburton's Lunatic Asylum	0
Brandenburgh-house Lunatic Asylum	1	London	2
Royal Military Asylum	1	Portuguese Jews' Hospital	0
Blacklands-house Lunatic Asylum	1	Lunatic Asylum, Bow ...	2
St. George...	13	Guy's	13
Grenadier Guards' Hospital	1	St. Thomas	3
Westminster	3	Bethlem	0
Charing-cross	1	St. Peter's Hospital ...	1
Middlesex...	1	Retreat Lunatic Asylum	0
Queen Charlotte's Lying-in Hospital	2	New County Lunatic	4
University College ...	0	Peckham House Lunatic Asylum	0
Small Pox...	1	Camberwell House Lunatic Asylum	2
Fever Hospital	2	Dreadnought Ship ...	0
Northumberland-house Lunatic Asylum ...	1	Devonshire Ship... ...	0
Invalid Asylum, Stoke Newington	0	Unité Hospital Ship ...	0
German Hospital... ...	1	Royal Ordnance	2
King's College	2	Royal Hospital, Chelsea (South)	2
St. Luke	0	Royal Hospital, Greenwich (East)	6
City of London Lying-in	3		

MORTALITY TABLE.

Deaths in the Week ending Saturday, Jan. 19, 1850.

(Metropolis.)

CAUSES OF DEATH.	Total.	Average of Ten Weeks.
ALL CAUSES	1156	1124
SPECIFIED CAUSES	1149	1117
Zymotic (or Epidemic, Endemic, and Contagious) Diseases	193	225
SPORADIC DISEASES:		
Dropsy, Cancer and other Diseases of uncertain or variable seat	46	57
Tubercular Diseases	207	178
Diseases of the brain, Spinal Marrow, Nerves, and Senses	129	128
Diseases of the Heart and Blood-vessels	51	33
Diseases of the Lungs, and of the other Organs of Respiration	263	244
Diseases of the Stomach, Liver, and other Organs of Digestion	58	62
Diseases of the Kidneys, &c.	9	9
Childbirth, Diseases of the Uterus, &c.	13	11
Rheumatism, Diseases of the Bones, Joints &c.	7	6
Diseases of the Skin, Cellular Tissue, &c.	4	
Malformations	5	
Premature Birth and Debility	35	
Atrophy	21	
Age	73	84
Sudden	7	11
Violence, Privation, Cold, and Intemperance	27	24
Causes not Specified	7	7

The following is the number of Deaths occurring from some of the more important special causes:—

Apoplexy	23	Heart	49	Phthisis 157	
Bronchitis ...	131	Hooping-cough	43	Pneumonia ...	85
Cholera.....	...	Hydrocephalus	29	Scarlatina	17
Childbirth	5	Influenza	7	Small-pox	7
Convulsions...	45	Liver	11	Stomach	8
Diarrhœa	10	Lungs	8	Teething	8
Dropsy	17	Measles	37	Typhus	33
Erysipelas ...	8	Paralysis	31	Uterus	4

BIRTHS AND DEATHS.

	Births.	Deaths.	Births over Deaths.
Males	683	546	137
Females	700	610	90
Total.....	1383	1156	227

METEOROLOGY OF THE WEEK.

Day.	Sunday	Monday	Tuesday.....	Wednesday.	Thursday ...	Friday	Saturday ...	Means ...
Mean of Barometer.	29·647	29·581	29·284	29·379	29·745	29·744	29·440	29·574
Mean of Thermometer. Dry.	28·3	28·0	25·5	29·7	33·1	32·7	40·6	31·1
Ditto. Dew Point.	25·9	21·2	22·3	26·9	29·0	30·7	37·7	27·7
Difference between the Mean Temperature of the day and the same day on an average of 7 years.	— 7·4	— 8·8	— 10·9	— 6·9	— 3·9	— 4·6	+ 3·1	— 5·5
General Direction of Wind. A.M.	N.E.	N.E.	N.E.	N.	N.	N. & S.W.	S.W. & W.	N.E. and N.
General Direction of Wind. P.M.	N.E.	N.E.	N.E.	N.	N.	S.S.E.	W.	
Amount of Horizontal Movement of the Air.	Miles. 140	240	100	100	70	85	65	SUM 800
Rain in Inches.	0·00	0·00	0·00	0·05	0·00	0·18	0·31	SUM 0·54
Electricity.*			Jan. 18th, between 9 a.m. and 1 p.m., positive, with strong tension. This was the only time at which electricity was shown during the week.					

* In this Column, A. stands for Active; N. for Negative; and P. for Positive.

MEDICAL NEWS.

MUSEUM OF THE ROYAL COLLEGE OF SURGEONS.—We observe that a valuable and beautiful addition has recently been made to the Museum of the Royal College of Surgeons, consisting of a series of highly-finished, and, apparently, most accurate, models, in wax, of the entire anatomy of the electrical ray, and showing the minute structure of the electrical apparatus in that remarkable fish. A tablet attached to the specimens informs us, that they are "Models of the Anatomy of the Torpedo, (*Torpedo Galvanii,*) prepared by Professor Calamai, of Florence; presented by His Imperial and Royal Highness the Grand Duke of Tuscany to Professor Owen, and by him to the Royal College of Surgeons.—January, 1850." The models are twelve in number, of the natural size or of parts highly magnified, each preserved in a handsome glazed case. The following are the descriptions which have been attached to them:—Case 1.—"Male torpedo; digestive, circulating, branchial, and electrical organs, *in situ.*" Case 2.—"Digestive, renal, and genital organs of the male torpedo, removed from the body and displayed." Case 3.—"Male torpedo, subcutaneous muscles, mucous tubes, and electrical organs." Case 4.—"Inner surface of the integument, showing the distribution of the mucous tubes." Case 5.—"Female torpedo, showing the ovaria and impregnated uteri." Case 6.—"Digestive, renal, and genital organs, the spiral intestinal valve and hepatic vessels of a female torpedo." Case 7.—"Female torpedo, nervous system and electrical organs." Case 8.—"Magnified models of the brain of the torpedo; 3 diameters." Case 9.—"Torpedo: magnified models of the structure of the galvanic columns of the electrical organ; 12 diameters." Case 10.—"Torpedo: magnified model of the ultimate distribution of the vessels and nerves of one of the plates of an electrical column; 400 diameters." Case 11.—"Torpedo: magnified models of the mucous tubes and savian corpuscles: 15 diameters. Distribution of nerves on the bulb of a mucous tube; 120 diameters." Case 12.—Torpedo; venous system, base of brain, ovum, embryo, and magnified models of the blood discs; 500 diameters." These are by far the most beautiful examples of the Florentine art which we have hitherto seen. We are informed that they were ordered by the Grand Duke to be expressly prepared for Professor Owen, after an interview with which the Professor was honoured during his visit to Florence in 1846. Professor Calamai, the Superintendent of the Wax-model Department in the Museum of Natural History at Florence, has prosecuted with much ability and success the anatomy of the torpedo, and has published the results of his dissections, which are so beautifully perpetuated in the models now in the Hunterian Museum, in a Work entitled "Sull'Anatomia Della Torpedine," 8vo., Firenze, 1845.

INTRODUCTORY LECTURE AT THE ST. GEORGE'S MEDICAL SCHOOL.—Dr. Daniell (late of Bath) Fellow of the College of Physicians, and Lecturer on the Principles and Practice of Medicine at St. George's School of Anatomy, Medicine, and Surgery, lately commenced his course.—"Gentlemen," said the learned Professor, "permit me to thank you for the gratifying evidence of support which has marked your approbation of my appointment as your teacher in the important subject of the Principles and Practice of our noble Profession. Believe me, I assented with reluctance to the kind proposal of one of your most eminent and valued Lecturers, Dr. Pettigrew, to appear before you in the responsible character of one of the Professors of this far-famed and highly appreciated School. I repeat, that my assent to the proposal was tardily yielded; not that the subject in which I shall be engaged is irksome, tedious, or uninteresting; but knowing the difficulties of conveying to a class of students, in appropriate terms, precise diction, and well adapted language, those observations on the treatment of disease which experience and abundant opportunities of practical remarks have furnished me, —aware, also, of the talent, matured advantages, and valued professional reputation of my colleagues, I felt myself overpowered by the contrast between their brilliant, useful, and efficient qualities, and my inexperienced efforts as a teacher; and here allow me to remark that one of your Professors in this school stands pre-eminent as an anatomical teacher. In a great measure, the high reputation of this well-appointed school is supported by the long-tried, able, and popular professional character of the disgtinguished gentleman to whom I allude—your Anatomical Teacher, Mr. Lane, second to none as a public lecturer; he combines with his well-earned professional reputation an unimpeached and unimpeachable character. With each and all of my colleagues, I hope to be associated in feelings of kindly fellowship as labourers in the extensive field of science and literature; I trust our friendship may be matured and cemented by reciprocal respect and regard for those attainments which add dignity to our useful profession, and that thus gradually we may unite our efforts to raise the standard of our generous and noble Profession above the consideration which it obtains in any other country—

"Friendship
Is not a plant of hasty growth,
Though nurtured in esteem's best soil;
The slow and gradual culture of kind intercourse
Must bring it to perfection."

Of one point I am certain—that of receiving at your hands a patient and attentive hearing; and permit me to hope, that your candour will overlook all imperfections:—

"That you will give me heart and give me time,
Till every string's accordant glee,
Is blended into harmony."

Advanced only in the knowledge of my Profession by the advantages derived from practical experience, and attentive observation in the treatment of disease, I am with yourselves a student in the varied interest connected with professional research. Thus we form one common bond of union in the ambitious pursuits of our useful calling, remembering the language of Cicero:—'Omnes artes, quæ ad humanitatem pertinent, habent quasi vinculum commune.'—(Much applause.") Dr. Daniell then commenced his lecture on "Peritonitis," demonstrating the various positions of the abdominal viscera, the complete or partial peritoneal covering they received, the peculiar character of serous membranes, contrasting their structural and functional peculiarities with those of mucous membranes, and entering fully into the morbid appearances of peritoneal inflammation, with the treatment to be pursued in those important varieties of structural disease. The Lecture was listened to with marked attention.

CHOLERA REWARDS.—The Middlesex magistrates have emulated the conduct of the several country parochial boards, and refused to grant a gratuity of 30*l.* to Mr. Lavies, Surgeon to the Tothill-street House of Correction, for his extra-services during the cholera. Mr. Hope, the gentleman who proposed the donation, resolutely and very properly refused to withdraw it; it was lost by a majority of 4. Sir Peter Laurie was one of the majority. If the public be desirous to have the services of the profession, in case the epidemic should return. they should scout such disgraceful conduct.

WESTERN CITY DISPENSARY.—The Court of Common Council have presented 52*l.* 10s. to the above Dispensary, and 200*l.* towards the building of the King's College Hospital.

WILSON *v.* ASHLEY.—The defendant in this action, a surgeon residing at Hightown, near Bradford, Yorkshire, being in ill health, sold his practice to the plaintiff for 400*l.*, for which he was to give him a year's introduction, and then to retire, binding himself not to practice within seven miles of Hightown. The money was to be paid by instalments, and, at the time of the trial, there were 50*l.* still unpaid. The action was brought for liquidated damages, on the ground that the defendant had failed to introduce the plaintiff to his best patients, and had resumed practice at Hightown. Defendant paid 50*l.* into Court in satisfaction of the damages. Evidence was adduced in favour of the plaintiff's claim, and a verdict for 300*l.* returned.

THE QUEEN *v.* CLUDERAY.—This was an appeal case against a capital conviction for administering poison to an infant, to wit, the berries of the cocculus indicus. At the trial of the prisoner, although it was proved that the child was seriously ill after the ingestion of the berries, it was contended, from medical evidence, that although the berries when broken up are dangerous, in the husk there is no danger that can accrue from them, and it appeared that the berries were given to the infant in that state. The point was reserved by Mr. Justice Williams, who tried the case at York. The conviction was confirmed by the Court, the judgment being, that when a man administered a thing that was poison, with intent to murder, but in such a way that it did not act, he was guilty. It was said at the trial, that the prisoner gave the berries for the child to play with, and that he accidentally put them into his mouth. The child was illegitimate, and the prisoner his father.

THE FUNDS OF ST. THOMAS'S HOSPITAL have been recently increased by the compulsory sale of some freehold property in Queen-street and Maiden-lane for the City improvements. The amount claimed, 2,700*l.*, being disputed, legal proceedings were had in the Lord Mayor's Court, and the jury awarded 2,300*l.* The City authorities offered 2,000*l.*

Dr. CAMPBELL, the superintendent of the Sanitarium at Darjeeling, and Dr. Hooker, the naturalist, the son of Sir William Hooker, while on a scientific tour in the Himalayas, were, according to the last received news from India, arrested and imprisoned by the Rajah of Sikkim. The reasons for this proceeding are not known. There seem to be no fears entertained that their lives are in danger, and it is probable that, ere this statement appears in print, they have been set at liberty. Dr. Campbell, it is said, has been treated with the greatest severity. Sikkim is within the territory of Thibet.

THE CHOLERA.—The latest cholera return for England gives four deaths from cholera, and five from diarrhœa; for Scotland, four from cholera, and none from diarrhœa. The disease evidently lingers in the country as an endemic, and may soon, if exciting causes prevail, again become a fearful epidemic. Let the public look to it; they have treated the Profession infamously.

ASYLUM FOR IDIOTS.—The late Sir Charles Forbes has left 500*l.* to this most excellent Institution.

UNWHOLESOME MEAT.—Thirty-eight sheep have recently been seized in Smithfield Market, and since killed. They were suffering at the time from the scab or small-pox, and Mr. Nice, veterinary surgeon, stated that their flesh would be unwholesome as an article of food. The person who sent them to market was fined 5*l.*

ROYAL INFIRMARY, EDINBURGH.—The Annual Report of the Infirmary, recently presented, shows

that 4006 patients were admitted during the past year; of whom 2466 were cured, 391 relieved, 84 received no benefit, and 518 died in the Hospital. 282 patients were remaining in the Hospital at the date of the Report. There were 726 cases of fever, and 132 of cholera; 88 of each complaint terminating fatally. The income exceeded the expenditure by 14*l*. The managers of the Hospital state, that they have purchased nearly all the remaining properties in Surgeons-square, with the exception of the house belonging to the Medical Society; and they purpose enlarging the Surgical Hospital, which they consider they will be able to effect without encroaching on any part of the existing capital, as they have received legacies and other bequests which, with the surplus of the present year, it is supposed will be sufficient to meet the whole of the contemplated expenditure. The late James Chalmers, a plumber, of Edinburgh, left 30,000*l*. to found a hospital for the sick and hurt; and it was proposed, at a meeting of the Town Council, by the Lord Provost, that some portion of this fund be appropriated to the enlargement of the Infirmary.

Typhus Fever is said to be fearfully severe in Vienna. Thirty-two medical men have been attacked by it.

Royal College of Surgeons. — The following gentlemen having undergone the necessary examinations for the diploma, were admitted members of the College at the meeting of the Court of Examiners on the 18th inst.:—Messrs. Samuel Taylor, Bolton, Lancashire; Peter Ambrose Cotterell, Birmingham; John Langford, St. Leonards at Sea, Sussex; James Keiran, Dublin; John Moore Swain, Long Clawson, Leicestershire; Izaak Dobree Chipmell, De Beauvoir, Guernsey; Watson Armorer, Newcastle-upon-Tyne; James Cleife Lane, Grosmont, Monmouthshire; Charles O'Callaghan, Killarney, Kerry; Leonard William Sedgwick, Boroughbridge, Yorkshire; and John Lee Jardine, Brixton Hill, Surrey. At the same meeting of the Court, Mr. George Clarke passed his examination for Naval Surgeon.

Apothecaries' Hall.—Names of gentlemen who passed their examination in the science and practice of Medicine, and received certificates to practise, on Thursday, 17th January, 1850:—Andrew Hamilton, Scarborough; John Hollingsworth, Staveley, Derbyshire; Leonard William Sedgwick, Boroughbridge; Thomas Warburton, Benfield, Leicester.

King's College Hospital.—At the last meeting of the Common Council of the City of London, the sum of 200*l*. was voted towards the fund now raising for increasing this valuable Institution, and, at the same meeting, the civic authorities granted fifty guineas to the Western City Dispensary.

Appointments.—Dr. John Manley has just been unanimously elected Physician to the City Dispensary, in the vacancy occasioned by the resignation of Dr. Bentley.

Naval Appointments.—Charles D. Steel, (1841), Surgeon; Eustace J. Walsh (1839) and John Cotton, (1847,) Assistant-Surgeons, to the Arethusa, 50 gun frigate.—Assistant-Surgeon H. D. Speer, from the Alligator to the Columbine.

Birmingham Lying-in Hospital.—At the meeting of the Quarterly Board of this Hospital, Mr. Haslack sent a cheque for 25*l*., and the Mayor 10*l*. 10s., as Christmas donations to the funds of the Institution.

Disease in California.—A settler in San Francisco, writing home, says, that the emigrants are dying at the rate of from seven to ten daily; so certainly is this looked for, that *the graves are got ready beforehand*. The people die like dogs of dysentery and fever. The water is thick, white, and very bad; it is also very dear; the regular price is half a dollar per gallon. The "chills" (the premonitory symptoms of fever, we presume,) are often fatal in twelve hours.

Warwickshire Prisons.—A sweeping measure of reform is contemplated with respect to these prisons, in the reduction of salaries. Among others, it is proposed to reduce the salary of the Surgeon of the House of Correction from 140*l*. to 100*l*. a year. We do not know the extent of this gentleman's duties, but, if we compare his salary with those given to parish-surgeons, and the hard work they have to perform, there cannot be a doubt but that he is greatly overpaid, and the others infamously underpaid. Need we say, that the latter is our opinion? The salary of the Surgeon to the Coventry Gaol is to be reduced from 50*l*. to 40*l*. a year.

Warwickshire Lunatic Asylum.—Mr. Green, surgeon, of Newhall-street, has been appointed the Medical Superintendent of this Asylum. His duties commence on the 1st of March.

Queen's Hospital, Birmingham.—The funds of this Institution have been increased by donations to the amount of upwards of 80*l*.

Queen's College, Birmingham.—Two additional lecture-halls, a library, model-room, and two engineering workshops, have been added to the above College.

Burning the Dead.—A Society has been formed for the purpose of substituting burning the dead, instead of interments. Such a proceeding would have the great inconvenience of preventing all possibility of discovering poisoning, if suspicions should arise at any future time. Under the present system, poisoning by arsenic has been detected fourteen years after death. If incremation be generally adopted, such a discovery of crime would be utterly prevented.

The Yellow Fever is committing great ravages at Antigua in the 54th Regiment. The navy has hitherto escaped. This disease has nearly ceased at Barbadoes. Small-pox has broken out at Granada, supposed to have been imported from Trinidad. Fever is said to be very prevalent at Port Royal, Jamaica. The Apollo, troop-ship, recently arrived at the Cape with cholera on board. The bad cases were landed at a small island called Rio Grande, where several deaths occurred. At the date of the report the ship was said to be healthy. There should be an inquiry as to the cause of the attack. The Apollo came from England.

Dr. George Paterson.—A large party of the professional and personal friends of this gentleman recently gave him a dinner at Archer's Hall, on the occasion of his leaving Edinburgh, to settle at Tiverton, in Devonshire. Dr. Sellers, President of the Northern College of Physicians, was in the chair; and Professor Syme, President of the Edinburgh College of Surgeons, was the croupier. Dr. Paterson was the Secretary to the College of Physicians.

Obituary.—After a few days' illness, John B. Abercromby, Esq., Surgeon.—On the 24th ult., of bronchitis, Dr. Kidd, Inspector of Military Hospitals.—Lately, aged 34, H. G. Harbord, Esq., surgeon, of Liverpool, one of the members of the Town-council.

Professor Giagomini.—The Italian journals announce the death of Professor Giagomini, of Padua, the reformer of Italian medicine.

Death of Dr. Clanny.—At his residence, Bishopwearmouth, on the 10th inst., Wm. Reid Clanny, Esq., M.D., F.R.S.E., M.R.I.A., K.C.S.I.I., Physician Extraordinary to H.R.H. the late Duke of Sussex, and upwards of forty-five years Physician to the Bishopwearmouth Infirmary, inventor of the first safety lamp, and an eminent contributor, in various branches of philosophy, to most of the leading publications of the day.

Moseley *v.* Houghton.—This was an action by an advertising dentist against a widow lady at Leamington, for 52*l*. 10s. for two sets of teeth. Credit was given for sundry payments, reducing the amount claimed to 41*l*. 10s. It appeared that the plaintiff had representatives at Exeter, Tenby, Monmouth, Leamington, Stratford, Coventry, and Warwick, who took casts of the patients' jaws in wax, afterwards made models of these in plaster of Paris, which were then sent to London, in order that the sets of teeth might be prepared. The delivery of the teeth was proved, and also the reasonableness of the charges. For the defence, Mr. Rogers, dentist, of Cork-street, stated, that the first set was perfectly useless, because when in the mouth, there were interstices between the gums and teeth, so that a whistle was produced when the defendant attempted to speak; and, as to the second set, they projected so much as to produce a hideous appearance. Mr. Hockley, another dentist, stated the mechanical arrangement of the artificial teeth was defective. In fact, they were proved to be utterly useless. The plaintiff's own witnesses showed that the second set was made because the first was utterly valueless to the unfortunate defendant. The jury, notwithstanding this evidence, gave a verdict for the amount claimed.

TO CORRESPONDENTS.

"Enquirer."—1. Books left at our publishers' will be reviewed. 2. Either Hodges and Smith's or Fannin's; at the latter, be believe, there is an excellent library. 3. Write to Edinburgh.

"B., Woolwich."—Some of the Rhine wines are nearly specific in curing gout. If our invalid Correspondent is not over particular in eating a piece of a horse or dog, he will find the *table d' hotes*, too, all very agreeable.

The note with the "Maidstone" post-mark is totally illegible.

"M.D."—The catalogue is, perhaps, not without its faults. A figure in one of the galleries of the British Museum, described as a high military officer, "bearing the shrine of Osiris," the eye of an anatomist lately made out to be — — a negress.

"H. G., Guy's."—The new school just finished at Clamart is the healthiest and nicest in Paris. The hour of visiting St. Louis and the Hôtel Dieu, eight o'clock.

"A Student" asks:—"Where in London is there a circulating medical library, or a reading-room, not attached to an hospital?"

"B., Minories."—The idea is borrowed from Valhalla, the happiness of which consisted in the inhabitants quaffing draughts from the skulls of their enemies slain in battle. 2. The cheapest, perhaps, Giessen.

"T. C."—Some experiments on dia-magnetism last week in London, show the phenomena very well. There is no shadow of doubt of the connexion between light and electricity, as explained by Faraday. In solutions of the silicates, the experiments, we believe, are best shown.

"H., Navan."—Coal-tar naphtha is the best solvent of gutta percha.

Our Leith Correspondent should pay postage.

"Graduate, Cambridge."—We have not the original German by us. If in town, we are quite sure our obliging friend, Mr. Stone, at the College of Surgeons, would make out the work; the subject is a very difficult one. Hassal tells us, that both Schwann, Valentin, and Remak, consider the corpuscles as cells; the last-mentioned states, that he has witnessed their development even within the cells which line the walls of the blood-vessels. Dr. Barry goes further; and the chrystalline lens, the spermatozoon, and the ovum, he looks on as but modified globules,—"*omne ex ovo*."

"Mr. E. W. Howey, of Bromyard," asks:—"Can the Editor or any of the readers of the 'Medical Times' refer me to a Union under the New Poor-law where the medical officers are paid for attendance only, and the medicine supplied from a voluntarily-supported dispensary, by paying for each Union patient at the same rate as private subscribers pay for their tickets? Or what valid objections could be made against such a plan?"

"M.R.C.S." shall receive our anxious consideration.

We have received a copy of a letter addressed by P. H. Holland, Esq., of 74, Upper Stamford-street, Blackfriars, to the General Board of Health, on *street cleanliness*. We quite agree in the views taken by Mr. Holland as to its importance as regards the public welfare and the real economy of incurring the expense necessary for its maintenance. Mr. Holland has well shown the advantages and convenience of sweeping by machines, and the necessity of occasionally using water for proper cleansing.

"Dr. Barker, of Dumfries."—Many thanks.

"Dr. Spencer Thomson," on Vesicles of Torulæ in Urine, will have early insertion.

We fear a union medical officer has no redress. He must bear or resign.

We quite agree with "Nimrod"; at present, however, it would not be desirable further to agitate the subject. We are collecting evidence.

"Truth" is advised to tell the truth to any respectable medical man, and to avoid a speciality doctor.

"An Assistant, Portarlington."—Bell's Anatomy, Cooper's First Lines, Royle's Materia Medica, and Reid's Chemistry.

"T. R."—We consider Mr. Churchill's Manuals the best published.

"A Chemist and Druggist and a Subscriber."—Certainly not.

The corrected proof of the second number of Dr. John Taylor's admirable paper on Pericarditis reached us, we regret to say, too late for insertion in the present Number.

"Dr. Joseph Dickson, of St. Helier's, Jersey," has favoured us with an interesting case of Monstrosity, which we propose speedily to lay before our readers.

The engraving illustrative of Mr. Chard's case is not yet prepared.

"Mr. Barrow" reports a severe case of algide cholera, occuring so late as the 7th of the current month, at Southport. The report reached us too late for this week's Number.

"Scrutator."—Next week.

"Un Chirurgien."—We will endeavour to obtain the information.

"A Constant Reader."—We will consider the proposal.

We are unable to afford Mr. Loveder the information he requires. We do not believe in a specific for Cholera.

"M.R.C.S." says, "I always give my opinion openly and freely, whether paid or not, and now I will just state my opinion regarding the vexatious question, of the offices remunerating the medical men. I always answer whether paid or not, but I think that a line should be drawn. When the medical man is employed by the Assurance Office as their Medical Examiner, I think it is their duty to pay him. But when a patient refers the office to his medical man as his friend and referee, then I think the patient or party about to insure is the party to pay; at the same time, I should never ask it of a friend and patient, but consider it as a friendly act, which every liberal-minded man would and should do for his friend, because I look upon the family medical man generally to be as good a friend as any man has."

A Correspondent at Wednesbury, writes, "In reference to Queso's Club question, in a late Number, the practice in this part of the country is 4s. per head per annum, if within a mile of the club-house, and 5s. if more; beyond three miles, 1s. per mile extra."

In consequence of a misdirection of his letter on the part of the Author, the following errata occurred in Mr. Tweed's, jun., paper on Artificial Leeches:—The first sentence of the 4th paragraph should run thus: "Each tube or leech is about two inches and a half long, two-thirds, or nearly so, of which, are covered with leather, with a diameter about that of a sixpence." In the 9th line, delete the words, "in the first place." In line 36, for "site" read "size;" in the 2nd column, line 20, for "rounded knot" read "round knob;" same column, line 40, read "We *now* introduce;" and in line 45, read, "holding it in this position firmly with the index finger and thumb of the left hand, we remove," &c.

ORIGINAL LECTURES.

LECTURES
ON
THE CHEMISTRY OF THE POISONS;
OR, ON
PRACTICAL TOXICOLOGY.

SHOWING THE APPLICATIONS OF CHEMISTRY TO THE DISCOVERY OF CRIME.

By H. LETHEBY, M.B., Lond:
Lecturer on Chemistry in the Medical College of the London Hospital.

LECTURE XIII.

Chemical effects of Nitric Acid on the Fluids and Tissues of the Living Body—Post-mortem appearances—Antidot. to the Poison—Methods to be adopted for the detection of the Acid. 1. In the contents of the stomach. 2. In such organic liquids as Porter, Vinegar, Urine, Peritoneal fluid, &c. 3. In the Tissues of the body. 4. Upon articles of clothing. 5. In river and well waters which receive the surface drainage from large towns—Importance of this part of the inquiry in a sanitary point of view.

Having made ourselves acquainted with the chemistry of nitric acid, we will now proceed to apply our knowledge to medico-legal purposes; and the first point to which I shall direct your attention is:—

The Chemical Effects of the Acid upon the Tissues and Fluids of the living Animal Body. — You have already seen that an acid, whose density is above 1100, acts readily on the albuminous tissues, for it instantly coagulates, and then more or less quickly discolours the surfaces of the dead mucous membranes. Now I hardly need tell you that it will exert a precisely similar action if it be permitted to flow over the living animal structures. Here, for instance, are the tongues, gullets, and stomachs of two individuals who were poisoned by strong nitric acid; and you may perceive that the entire mucous surfaces of these several parts are deeply stained of a bright citron yellow colour. In one of these cases the sufferer, a girl aged two years and a half, drank only about two teaspoonfuls of an acid having a density of 1267; but, notwithstanding that the specific gravity of the aqua fortis was thus low, that the child drank freely of diluents directly after it had swallowed the poison, and that it survived the accident for several days, yet the discoloration of the mucous membrane is particularly well marked. In point of fact, it is not an easy thing to get rid of the yellow stain produced by nitric acid, for it persists as long as the cuticular surface remains intact; it even continues to be evident for some time after the decomposition of the part. In these preparations the colour has been preserved for a considerable period of time, simply by immersing the parts in weak spirit.

As regards the distance to which the discoloration caused by the acid may extend along the alimentary canal, you may notice, from these cases, that the orange-yellow tint becomes much paler soon after you pass the pyloric end of the stomach, and that it ceases to be evident beyond the second turn of the duodenum, at which point it is very likely that the alkaline secretions from the liver and intestines had quite neutralized the corrosive power of the acid.

Other effects, which occasionally result from the action of this poison, are the solution and perforation of the walls of the stomach. Some authorities state, that the latter effect is not by any means a common one; but, if you examine the smaller of these stomachs, you will observe that the acid has quite eaten through the posterior and inferior boundary of the organ, making a round hole therein of about the size of a halfpenny. I am quite sure that this perforation took place long before death, inasmuch as the edges of the opening are perfectly smooth; they are, moreover, tinted of a yellow colour, and the surrounding parts are firmly bound together by effused and partially organized lymph. Again: in all cases of rapid death from nitric acid, you will be sure to find abundant evidence of the solutive action of the poison in the softened condition of the tissues of the stomach generally; for in such cases the mucous surface of this organ is commonly reduced to a pulpy state, and in many instances the walls of it are so rotten that they easily give way before the finger-nail.

Like other corrosive acids, aqua fortis acts strongly on the blood contained in the vessels of the digestive organs, and converts it into a black pitchy-looking compound. Hence it is that you will usually find numerous dark vascular ramifications upon the outer surface of the stomach; and should the mucous membrane of this organ have been dissolved or destroyed during the lifetime of the sufferer, some of this dark grumous-looking matter will escape into the cavity of the stomach, and be either vomited up or else passed, at a later period, by stool. A portion of the acid may also escape into the cavity of the abdomen. This may occur either by perforation, or by transudation. In the former case the surrounding parts are generally stained of a yellow colour, and firmly agglutinated by means of coagulated lymph; while, in the latter, the acid may merely give a slight irritating character to the peritoneal fluid, and so set up a milder, but, perhaps, more extensive inflammatory action. Lastly, I ought to state, that if the transuded or effused acid come into contact with the bile contained in the gall bladder, it will communicate to this fluid a deep greenish or purplish colour.

Now, although these are the *post-mortem* appearances commonly presented in a case of rapid poisoning by nitric acid, yet they may, under certain circumstances, assume a different aspect; in proof of which I will quote a case from Mr. Taylor:—"A man swallowed about two ounces of aqua-fortis, and died speedily from its effects. On examining the body, the lips were found partly yellow and partly of a brownish red colour, dried up like parchment. Several yellow or parchment-coloured spots were observed on the chin as also on the cravat. The mucous membrane of the mouth was white, and easily detached,—that of the tongue was dry and hard,—that of the pharynx and œsophagus yellowish green in colour, and of a leathery consistence. The stomach contained a dark-coloured liquid, highly acid. It was externally mottled, of a greenish-blue and black colour. The mucous membrane throughout was softened, and in a gangrenous condition. The same appearances were met with, although in a less degree, in the duodenum and upper part of the ilium. On analysis, the contents of the stomach yielded nitric acid." In this case the whitening effect observed in the mouth was doubtless due to the action of a weak acid, and the dried, parchment-like appearance of the lips and chin were, in all probability, the result of a drying or desiccation of the corroded surfaces. Looking at the facts generally, it may be said, that the yellowing effect of nitric acid is by far the most common, certain, and valuable sign of its action; and, should you be called on to investigate a case of poisoning by aqua fortis, it is your duty to seek for this effect, not only upon the cuticle of the lips, mouth, tongue, pharynx, œsophagus, and stomach, but also upon the general surface of the body, and upon the woollen and silk clothing worn by the victim, or by any other party who may be implicated in the inquiry.

I have already informed you, that this yellowing of the tissue results from the formation of an insoluble compound of nitrous acid with albumen, called *xanthoproteic acid*, and notwithstanding that two other substances, viz., iodine and bromine will produce stains which have a somewhat similar appearance; yet, in the two latter cases, the discolorations are instantly discharged by means of a little caustic alkali, (potash or ammonia,) a re-agent which only serves to heighten the colour produced by aqua-fortis.

The powerfully corrosive nature of this acid renders it such a destructive agent, that death commonly takes place in a few hours after the poison has gained access to the stomach. There are, however, several instances on record in which individuals have survived for months after having drank a considerable quantity of the acid; but, in these cases the sufferers have lingered on, only to die at last from extreme exhaustion, the stomach having been so deranged by the corrosive action of the liquid, as to be quite unfitted for the proper performance of the digestive functions. On making *post-mortem* examinations in these cases, it has been remarked, that the calibre of the œsophagus has been reduced, and that the mucous membrane of the stomach has become thick and puckered.

With regard to the subject of antidotes, and the treatment which you are to adopt in cases of poisoning by aqua fortis, I have merely to reiterate that which I said on a former occasion, when I was speaking of the antidotes to sulphuric acid. Your remedies being chalk and water, magnesia, white of egg, flour, or even soap and water, if nothing better be at hand, for the best practice is the promptest; and do not, I implore you, ever be rash enough to increase the mischief which is already effected by resorting to the use of the stomach-pump. Moreover, a knowledge of the serious injury which must necessarily have been done by the chemical effects of the acid upon the coats of the stomach, will suggest to you the propriety of using demulcents to sheathe the parts, opiates to calm the system, and active leeching, if it be necessary, to combat the very first signs of inflammatory action.

METHODS TO BE ADOPTED FOR THE DETECTION OF NITRIC ACID IN THE TISSUES AND FLUIDS OF THE ANIMAL BODY.

1st. *In the contents of the Stomach.*—Here I must tell you, before I proceed with our experiments, that it is not at any time an easy thing to determine the presence of nitric acid in the matters removed from the alimentary canal; for not only might the poison be neutralized by the antidotes administered, but it might even be rendered soluble, or nearly so, by a combination with albumen, or, what is worse still, it might be decomposed in the course of our operations, by the saccharine or amylaceous matters with which it is in all such cases associated. These difficulties have been felt by every toxicologist who has devoted his attention to the subject, and many suggestions have been offered in the hope of overcoming them; but, as Professor Christison says, "a pure and delicate process" for the detection of this acid in organic mixtures," is still a desideratum in medico-legal chemistry." Guided, however, by certain rules which I have laid down for the examination of matters supposed to contain poison, I have determined upon a plan of operation which is founded upon the processes recommended by Christison and Orfila.

The following is an outline of it. Treat the contents of the stomach, if necessary, with a little distilled water; then neutralise them, or, what is better still, make them slightly alkaline, with a solution of bicarbonate of potash; apply heat to the mixture, so as to raise it to the boiling point; then filter it through fine muslin or coarse paper, and evaporate it to dryness in a water-bath. Drench the residue with strong alcohol, so as to dissolve out chlorides, sugar, &c. That which remains is to be dissolved in water, filtered, evaporated, and tested for nitric acid in the manner already shown you.

In the course of these operations the grosser impurities are removed by the first filtration, and by the addition of bicarbonate of potash, saltpetre is formed at the expense of free nitric acid, of the nitrates of lime, magnesia, albumen, &c.; and, from the circumstance of this salt being almost insoluble in pure alcohol, it is separated from such impurities as sugar, chlorides, lactates, &c.; but, as it is very possible that you may employ a weaker spirit in your analysis, a portion of the nitrate will, in all probability, be dissolved by the liquid and lost. This is the great drawback to our confidence in the process; but, for all this, I prefer it to that which has been proposed by Professor Christison, who advises us to "macerate the subject of analysis for a few hours in distilled water, if it be not already liquid enough; and then to boil it for a few minutes, and to filter. Ascertain now, whether the fluid be acid to litmus; and, if it be so, neutralise it with solution of potash, or, as Orfila suggests, with a solution of the purer salt, the bicarbonate of soda. Evaporate gently, to obtain crystals, if possible; and, if these do not tend to the cubical form, distil them with sulphuric acid, and proceed as directed for nitric acid simply diluted. If crystals do not appear, or their form tend to the cube—in which case chloride of sodium is present,—redis-

solve the whole residue of the evaporation in distilled water; add a slight excess of a warm solution of acetate of silver, to throw down organic matter and the chlorine of chlorides that may be present; filter and evaporate to dryness, and distil the residuum with sulphuric acid; apply as usual to the vapour the tests of litmus paper and morphia; also, as Orfila proposes the solution of narcotine in sulphuric acid and protosulphate of iron in water; and, if the quantity of vapour be great enough, the sense of smell and the action of copper with the condensed vapour."

The objections which may be raised to the preceding are:—Firstly. That a considerable quantity of nitric acid must be present in the liquid examined in order to get any evidence of crystallization in the mass of organic matter produced by the first evaporation. Secondly, that when nitrate of soda is formed in the liquid, it is very difficult to distinguish the rhombic crystals of this substance from the cubes of a soluble chloride. Thirdly, that if such a chloride exist in the matters which are subjected to distillation, chlorine, not nitric acid, will be the product of the operation. Fourthly. That saccharine and amylaceous compounds will also decompose the nitric acid, and lead to the formation of oxalic, mucic, carbonic, and other acids. Fifthly. That the addition of a salt of silver to any such questionable matter is very objectionable in a medico-legal point of view, inasmuch as it might interfere with the discovery of other metallic poisons. Sixthly. That the process does not provide for such sources of fallacy as the chlorates, bromates, iodates, &c. And, Seventhly. That as the *modus operandi* is grounded upon the supposition that nitric acid is the only poison present, it might mislead the operator, not only by directing him upon a wrong route, but also by preventing the discovery of other pernicious substances.

Mr. Taylor's process is barbarous in the extreme. He advises us to filter the liquid, and then to neutralize it, if necessary, with liquor potassæ, after which it is to be boiled for two hours, with a large quantity of well-washed animal charcoal. This being accomplished, it is to be again filtered, concentrated, and tested for nitric acid. "The crystals obtained," says Mr. Taylor, "may be coloured and impure; but," continues our author, "this circumstance *does not at all interfere* with the action of the most important test for nitric acid, viz., that by copper filings and sulphuric acid." Now, it is really worth while to take a portion of some common alimentary liquid, such as broth or beef-tea, and, having mixed it with a little sugar and common salt, so as to simulate the contents of a stomach, to charge it with fifteen or twenty drops of aqua fortis, and then to treat it in the manner recommended by Mr. Taylor, in order to judge of the utter insufficiency of his process. You will doubtless find that much colouring matter is removed during the prolonged ebullition of the fluid, but you will also find that the animal charcoal has not the power of absorbing any of the more objectionable constituents of the liquid, as, for example, the sugar, the proteine, the common salt, &c.; and, consequently, when you proceed to filter the dirty-looking mixture, the impurities will clog the pores of the paper, and defy all your efforts to effect a hasty percolation. Wait, however, for a day or two, and you may be fortunate enough to obtain a few drachms of the filtered liquid. This you are to concentrate by evaporation, when, much to your astonishment, the residue will look as brown as if it had never been clarified; in fact, to use Mr. Taylor's expression, "the crystals will be coloured and impure;" and on treating them with copper filings and sulphuric acid, you will discover that, instead of obtaining the red vapours of nitrous acid, the test-tube will be filled with the yellowish-green fumes of chlorine, showing that "this circumstance," the presence of an impurity (common salt) *does interfere*, and that very materially, with the action of Mr. Taylor's "most important test." In fine, the process is not worthy of a more prolonged examination. It is enough for you to know, that it is defective in principle, and that its results are fallacious and uncertain. Besides which, I ought to tell you that the employment of animal charcoal in any chemico-legal research is exceedingly objectionable; for, while on the one hand you can never rely on the purity of this substance, so on the other, if the liquid examined contain other poisons, as, for example, lead, silver, mercury, the vegetable alkaloids, prussic acid, oxalic acid, or oil of vitriol, they will be either absorbed or neutralized by the agent referred to, and thus placed beyond the reach of further inquiry.

2. *In other organic fluids, such as Porter, Vinegar, Urine, Peritoneal Fluid, &c.*—These liquids are to be tested with litmus paper, then neutralized with potash, and treated with alcohol and water, in the manner already described. While speaking on this point, I am anxious to remind you of a fact which has been announced by Orfila and confirmed by others, viz., that when nitric acid or a nitrate has been administered internally, a salt of this acid soon makes its appearance in the urine. It is your duty, therefore, carefully to examine this secretion, and to bear in mind that the nitrates do not naturally exist therein. In a case of poisoning by saltpetre, which came under my notice a few years since, so much of the nitre was eliminated by the kidneys, that the urine, when dried and heated on filtering paper, deflagrated.

3. *In the Tissues of the Stomach, &c.*—When strong nitric acid has been brought into contact with animal tissues, it forms compounds which are not very soluble in water, consequently you will, in most cases, have but little difficulty in recognising the presence of the acid in the mucous membrane of the stomach, even when this organ has been emptied of its contents and exposed to the action of water or other diluents. Here, for instance, are portions of stomach, intestine, cuticle, white of egg, and blood, all of which have been acted on by strong nitric acid, then washed and dried. The pieces of stomach and intestine have, moreover, been exposed to the air for a period of twenty-three weeks. On examining them you will notice that they have a yellowish brown colour, and that they are still slightly acid to moistened litmus paper. To prove that this acid is nitric you are to make a mixture of equal parts of pure oil of vitriol and water. Put twenty drops of this mixture into each of four test tubes. To the first, add a little brucia, strychnia, or morphia, and then a small piece of the acid tissue; if necessary, apply heat, and you will instantly obtain the characteristic blood red colour to which I have before alluded. Colour the liquid in the second test tube with a small quantity of sulphate of indigo, then introduce a fragment of the tissue, and if the blue colour is not instantly discharged apply heat. Into the third portion of dilute acid, drop a grain or so of copper filings, and then a piece of the tissue. On making the liquid boil, you will find that the evolved vapour has the power of giving a blue colour to a piece of paper moistened with starch and iodide of potassium.

The liquid contained in the fourth tube is to be treated in the same way as the last, and by using a larger portion of the acid tissue you will have no difficulty in producing a deep olive brown colour with a solution of protosulphate of iron, and thus to to demonstrate the presence of free nitric acid.

It may happen, however, that the tissue has quite lost its power of reddening litmus, the excess of acid having been entirely removed by the antidotes administered. In such a case, you are to search for that portion of the poison which is more firmly fixed in the tissue. Heat the substance, therefore, with its own bulk of liquor potassæ, by which means the organic compound will be broken up and dissolved. If nitric acid be present, the liquor acquires a deep brown colour; and, on acidifying it with strong oil of vitriol, and then testing it in the way just mentioned, you will obtain the desired proofs respecting the presence of the poison.

4. *In detecting the Acid on Clothing*, you are to rely, first, on the appearance of the fabric; for, as I have already shown you, aqua fortis has the power of reddening and then discharging most vegetable colours, and of giving a yellow or brownish tint to most animal tissues. It is commonly stated that nitric acid, from its being a volatile liquid, is rapidly evolved from those parts of the dress on which it has fallen. One medico-legal author tells us that he was unable to recognise the presence of nitric acid on a blue stuff coat, which was sent to him for examination five weeks after the acid had been spilt upon it, notwithstanding that the sleeve and body of the coat were found to be covered with numerous spots of a yellowish brown colour. There was no doubt, says Mr. Taylor, that nitric acid had been used, but, failing to discover it, this gentleman concluded that its disappearance was due, partly to its decomposition in the stuff, and partly to its volatility. Now, as these statements are likely to mislead you, I am bound to direct your attention to a few facts which have an opposite import.

Here are several pieces of linen and woollen cloth upon which I have spilt acids of various strengths. This was done more than *five months* ago, and the fabrics have been exposed ever since to a free current of air. Some of the woollen stuffs are, as you perceive, more or less deeply stained of a citron yellow colour. These spots are still very acid to litmus paper, and exhibit ample proofs of the presence of free nitric acid. In the experiments which I am about to conduct, I shall not make choice of the tissues which are so stained, but I shall place before you some small pieces of flannel and linen cloth which have been touched with a solution consisting of 10 drops of commercial nitric acid in 1000 of water, a liquid which contains much less than one per cent. of pure nitric acid. Now, although these fabrics have been exposed to the air for the time mentioned, and are quite dry, being neither stained nor corroded by the poison, yet they still exhibit a faint acid re-action when they are pressed on moistened litmus paper. And by taking small pieces from these stuffs, and testing them in the same way as you did the tissues of the stomach, you will have no difficulty whatever in demonstrating the presence of free nitric acid. Here, for instance, is an acid solution of brucia, and on heating it with a portion of the fabric, every fibre of the cloth instantly acquires a deep blood-red colour. Here it discharges the blue colour of an acid solution of indigo, and here again it evolves vapours which act upon iodized paper. All these experiments clearly show you that there must have been some monstrous source of failure in the case of the coat just referred to; in fact, if we may judge from the following observations, we may conclude that there was a great want of dexterity in the operator. "I have been able," says Mr. Taylor, "to procure certain evidence of the presence of nitric acid in stains on black cloth, a fortnight after the liquid had been spilled. The quantity of acid present was, however, *so small*, that, on adding to the filtered liquid gold-leaf and muriatic acid, and boiling, there was no apparent solution of the metal, nor, on trying another portion with sulphate of indigo, was the colour discharged. A third portion of the acid liquid was neutralized by carbonate of potash, and evaporated, when crystals of nitre (amounting to about a grain) were obtained. These rapidly gave, with copper filings and sulphuric acid, the character of a nitrate. There was but a thin slip of cloth used in the experiment." In all, therefore, Mr. Taylor must have procured about three grains of nitre from this "thin slip of cloth," and yet he failed in getting more than one test for the nitric acid to act. With such a fact as this before you, I trust that you will never think of resorting to the gold-leaf test, and that you will be especially careful not to perform the indigo experiment in a bungling or slovenly manner.

To go still further with this inquiry, I now place before you portions of gun-cotton and of woollen cloth which had been stained by nitric acid. Both these substances have been well washed, and they do not at present exhibit the least sign of acidity, for they neither redden litmus, nor do they stain the vitriolic solution of brucia. The acid, however, is still resident in these tissues; for by dissolving them in a little liquor potassæ, you will observe the discolouration of the fluid, and on testing it in the manner already described, you will get indisputable proofs of the presence of the poison. So that, on reviewing the facts which I have just placed before you, you will, I think, hesitate in admitting, that this corrosive acid is rapidly evolved from or decomposed by the tissue upon which it has fallen, and you will scarcely venture to conclude, with Mr. Taylor, either that the deeply-stained portions of the mucous membrane of the stomach commonly yield *but very faint traces of the acid*, or that, should the water in which the yellow spots have been steeped, acquire no

acid re-action, there is then *no perceptible quantity of acid present.* On the contrary, you will proceed with your investigations in the full assurance that there is every probability of the poison being still present and detectable. And I would, moreover, advise you to take no heed of such observations as the following;—that "the discovery of no more than traces of acid in these cases of poisoning is tantamount to a failure of the chemical branch of evidence;" for I believe that such opinions are entirely founded upon that want of confidence which is the result of unsuccessful manipulation and imperfect knowledge of the real resources of our art.

5. Detection of the Acid in River and Well Waters.—Very recently the researches of Liebig, Thompson, Penny, Deville, Herapath, and others have shown that the potable waters of large towns, as well as the fluid matters of sewers, grave-yards, and other localities in which decomposing animal compounds exist, contain nitrates in greater or less proportion. Liebig, in 1827, detected these salts in twelve of the public wells of Giessen, although he could not discover them in any of the springs, which were two or three hundred yards out of that city. Dr. Smith has examined thirty of the wells of Manchester, and he states that nitric acid exists in all of them. Mr. Herapath has discovered nitrates in the waters made use of by the inhabitants of Bath. And I have frequently detected these salts in Thames water, as well as in the water furnished by the following Companies—the Chelsea, West Middlesex, Southwark, Grand Junction, Lambeth, Southwark, and East Kent, all of which derive their supplies from the river Thames below Kew. Moreover, I have noticed, that those Companies which receive their water from the Thames below Battersea, distribute a liquid which is very highly charged with this salt. Now, it is evident that the nitrates are not natural constituents of Thames water, inasmuch as the analyses made by Mr. Clark (under the superintendence of Dr. Hoffman) of the water taken up at Twickenham, which is fourteen miles above London-bridge, do not indicate the presence of these salts. Again, I have remarked, that nitrates exist in the well-waters of Oxford; and Drs. Penny and Thompson have both announced, that these salts are to be found in the waters supplied by the public wells of Glasgow. To judge from Professor Penny's analyses, it appears that the proportion of alkaline nitrate varies from ·4 to 11·7 grains in the imperial gallon; while, according to Dr. Thompson, the same waters have furnished from ·22 to 3·64 grains of dry nitric acid per imperial gallon. Among the wells of Glasgow, which yield the largest amount of nitric acid is St. David's,—a well which Dr. Thompson says, derives its large amount of solid impurities from the church-yard, with which it is in close proximity.

In commenting on the probable origin of this acid in the water of large cities, Dr. Thompson very justly remarks, that as no traces of this impurity have yet been recognised in the wells which are situated in country places, we are compelled to connect its source with the proximity of living beings; and, in fact, to conclude, that it is derived from the excrements, the urine, and putrid debris of the inhabitants of large towns. These noxious matters, by undergoing decomposition, liberate ammonia, which, by a process of slow oxydation, furnishes the acid in question; for, as Berthollet, Kuhlmann, Dumas, and others, have shown by their inquiries into the nitrification of soils, that while nitric acid is capable of furnishing ammonia under the influence of nascent hydrogen, so, conversely, the ammonia which is slowly liberated from decomposing organic compounds may, under the influence of certain circumstances, as for example, the presence of a strong base, furnish nitric acid, or more properly speaking, a nitrate. These facts, by giving us an insight into the source of the impurity, warrant us in concluding, that the discovery of nitric acid in the waters of large towns is, at all times, an important indication of the pollution of the stream by foul and putrefying products. I urge this, therefore, upon your attention, inasmuch as it may, in conjunction with other facts, be valuable to you in a sanitary point of view. Only within the last month a report has emanated from the Registrar-general, in which is pointed out the close relation which subsists between the supply of bad water and the ravages of cholera. This is well told in the following sentences, which I shall quote from the *Medical Gazette*:—

"Arranging the twelve groups of districts of this metropolis in the order of mortality, it appears that the mortality from cholera was lowest, or 10, 17, and 23 to 10,000 inhabitants—in districts which have their water chiefly from the Thames, as high as Hammersmith and Kew. Upon the other hand, the mortality was highest—or 131, 156, and 268 to 10,000 inhabitants—in the districts which have their water from the Thames so low as Battersea and the Hungerford-bridge. The districts of the New River occupy an intermediate station."

"For those unacquainted with the Thames, it is necessary to state, that the contents of the greater part of the drains, sinks, and water-closets of 2,200,000 people, after stagnating in the sewers, are poured daily into its waters, which spread over more than 2,000 acres in the midst of the inhabited parts, and are incessantly agitated by the tides, which ascend to Teddington, and carry the matters in the thickest waters below London-bridge, a mile and a half above Battersea-bridge, twice a day. The large Chelsea sewers open into the Thames above the point at which the water is taken up from the Thames by the Southwark and Chelsea Water Companies; but, the suction-pipe of the Chelsea Company extends into the centre of the stream."

In order to detect the nitrates in these waters, it is necessary to evaporate about a quart of them almost to dryness, to treat the residue with a little bicarbonate of potash in solution; then to boil again, filter, and evaporate to dryness. Wash the dry product with a little alcohol, and test the residuum with brucia, indigo, and iodized starch, in the manner already indicated. Or, if you should wish to determine the proportion of nitric acid present, you may operate upon the almost dry product of the first evaporation (using a gallon of water) in the way recommended by Pelouze.

ORIGINAL CONTRIBUTIONS.

ON THE TREATMENT OF ACUTE PERICARDITIS; ESPECIALLY ON THE EFFECTS OF BLOOD-LETTING AND MERCURY IN THAT DISEASE.

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(Continued from page 35.)

In the preceding inquiry into the effects of bleeding in pericarditis, I have followed pretty closely the method adopted by M. Louis, in his "Recherches sur les Effets de la Saignée dans quelques Maladies Inflammatoires;"(a) both because I am convinced that the method is the only one by which the truth can be arrived at, and also that I might be enabled to compare my results with his. The cases I have analysed are too few in number to justify me in regarding the results as anything more than approximations to the truth. Results absolutely true, can only be deduced from such a mass of cases as no single individual can have the means of collecting out of his own practice. I offer my own little bundle of facts as a contribution to the mass required, conscious that I have spared no pains to render them accurate, as far as they go. In statistical inquiries it often happens, that the conclusions drawn from a small number of carefully observed facts, are confirmed by the examination of a much more extended series. It is, perhaps, chiefly in cases in which the individual facts are less trustworthy, that the results deduced from a small and a large number differ widely. In such circumstances a large number of facts is required, in order that the contrary errors of the individual ones may destroy each other. This consideration, together with the general agreement of my results, with those of so distinguished an observer as M. Louis, increases my confidence in the substantial accuracy of the conclusions, which I will now recapitulate.

(a) Op. Cit. Paris, 1835.

1. The *duration* of pericarditis increases, in proportion as the time is longer between the commencement of the disease and the first bleeding. (P. 34, col. 1.)

2. The duration of the cases bled after the first four days, is greater by one-half than that of those bled within the first four days from the invasion of the disease. (P. 34, col. 2.)

The beneficial influence of bleeding appears to have been greater in my cases of pericarditis, than in the cases of pneumonia, erysipelas of the face, and inflammatory sore throat, analysed by M. Louis.

3. The influence of bleeding was more marked in the cases in which it was copiously and repeatedly as well as early practised, than in those from which blood was drawn less frequently and more sparingly. (P. 34, col. 2.)

4. Pericarditis is never extinguished at once by bleeding, however early or however copiously practised. (P. 34, col. 3.) It is, therefore, important to keep in mind the remark of M. Louis, "that as inflammatory diseases do not admit of being 'strangled' we ought not to multiply bleedings with the view of attaining this imaginary result; that we must not forget, also, that a certain degree of strength is necessary for the resolution of inflammation, since it is the more serious, and surrounded with more dangers, in proportion as the subjects of it are feebler, and that this feebleness likewise favours the development of secondary affections in its course." (a)

5. In several of my cases the pericarditis was suspended during a period of several days. The suspension in every instance was immediately consequent upon the local abstraction of blood. (P. 34, col. 3.)

6. It is probable that renal has a longer duration than rheumatic pericarditis. This difference may be due, in part at least, to the greater age, and inferior general health of the subjects of the renal form of the disease. (P. 34, col. 3.)

7. Bloodletting must be less copious, and is more frequently inadmissible in renal than in rheumatic pericarditis. (P. 33, col. 3.)

8. Bloodletting probably lessens the mortality, inasmuch as it has been shown that it lessens the duration of pericarditis; but direct proof of the reduction of the mortality is not to be obtained from my cases.

9. The abstraction of blood by venesection, cupping, or leeches, almost invariably relieved the pain at once, but not permanently. There is no reason to believe that any one form of bleeding relieved pain more effectually than another: a very small detraction of blood, by any means, was sufficient to produce this result. Relief of pain did not imply any abatement of the internal inflammation. (P. 35, col. 1.)

10. Effect of bleeding on the pulse. (See p. 35, col. 1.)

11. The tendency to syncope, in some cases of pericarditis, renders it necessary for us to be very cautious in abstracting blood, especially by venesection. (P. 35, col. 1.)

12. Free venesection for pericarditis does not always prevent the subsequent appearance of serious inflammation in other internal organs. (P. 35, col. 1.)

OF THE EFFECTS OF MERCURY IN PERICARDITIS.

The effects of mercury are to be estimated, like those of bleeding, by its influence on the mortality and duration of the disease and by the relief of particular symptoms.

1. *Effect upon the Ratio of Mortality.*

CLASS I.

Of the 21 patients in this class, 19 were salivated, 1 took mercury for 19 days, but without salivation (20). In 1 no mercury was given after the pericarditis appeared, but a dose of calomel had been given every night for ten nights, and was omitted two days only before the pericarditis supervened.

Four cases out of the 21 were fatal.

We cannot compare the mortality of those treated with and without mercury in this class, because all the patients took it. An examination of the details of the cases as given, page 74, (No. 7—1, 2, 19,) will show that the unfavourable result cannot be ascribed to the want of mercury.

(a) Op. Cit., p. 32.

CLASS II.

This class comprises 17 cases, all fatal.

Of these, salivation was produced during the pericarditis in (27, 21, 22)	3
Salivation was produced and maintained for a month, but had been omitted for a month before the pericarditis appeared in (No. 24.)	1
Mercury was given, but no salivation produced in (26, 26, 28, 29, 32)	5
No mercury was given, or other treatment adopted in (30, 31, 35, 36, 37, 38, 39, 40)	8
	17

Thus, *three* only of the patients in this class were salivated during the progress of the disease, and *eight* only took mercury. It deserves to be remarked, that all the patients in this class died, and that only one half of them took mercury; whereas, among the patients in the first class, the mortality was small, and they all took mercury. We have had occasion to make the same observation respecting the employment of bloodletting in the two classes (p. 33), and the remark already made respecting the one remedy is equally applicable to the other, viz., that the difference in the mortality is not due to the use or omission of any remedy, but to the difference in the form of the disease.

Among the cases not treated at all, there are only two (35, 37) in which there is the smallest probability that any treatment could have led to a more favourable result: and among the cases in which mercury was given but no salivation produced, there is only one (32) in which we can suppose that the earlier and freer administration of this remedy could have led to a favourable issue.

2. *Effect of Mercury upon the Duration of Pericarditis.*

We have not the means of comparing the duration of cases treated with and without mercury; the only way, therefore, by which we can attempt to determine the influence of this remedy, is by comparing, as in the case of bloodletting, the duration of the cases in which the remedy was employed early, with that of those in which its use was deferred unto a later period of the disease.

The question of the utility of mercury in inflammation of the pericardium, and other serous membranes, is one of such importance, and upon which such decided opinions are entertained by the most respectable physicians, that it seems to me desirable to give a brief outline of the facts of each case, so far as they bear upon the use of this remedy, in order to furnish every one with the means of testing the accuracy of the conclusions to be drawn from them. The preparation used, in almost every case, was calomel.

CLASS I.

Case 1.—Treatment began the first day. Mouth sore in 24 hours. Bleeding also employed. Death in 72 hours. Pericardium everywhere adherent except at apex. Pleuro-pneumonia of left side.

Case 2.—Treatment on admission. Mouth sore on fifth day. Friction-sound ceased 2 days before, and death occurred 2 days after, ptyalism. Very free and early bleeding. Universal adhesions of pericardium. Complications. Severe endocarditis from the first. Pleuritis appeared 2 days before ptyalism, and was found nearly cured.

Case 3.—Treatment first day. Gums sore in 24 hours. Very free bleeding. Friction-sound *diminished* on the evening of the fourth day, and ceased on the tenth; *i. e.*, nine days after gums tender. No complications.

Case 4.—Treatment first day. Gums sore early. Was bled freely. Was perhaps convalescent in from 14 to 18 days. Pulse down to 70 or 80; but friction-sound continued to twenty-second or twenty-fourth day: that is, about 8 weeks after ptyalism appeared. No complications. Severe pleuro-pneumonia, however, supervened, as the pericarditis ceased. Treated by bleeding, mercury, end tartar emetic. On fifth day nearly gone. No second ptyalism.

Case 5.—Treatment on eighth day. Gums sore 2 days after. Very copious blood-letting. Friction-sound continued 22 days, and in a trifling degree 60 days, after gums tender. Complications: Pleuritis and rheumatism, unchecked by ptyalism, and pleuritis of one side, and pneumonia of both lungs supervened whilst the mouth was sore.

Case 6.—Treatment began fourth day. Mercury, eleventh day. Gums sore seventeenth day. Copious blood-letting. Friction-sound continued 32 days. Disease, however, appeared to abate about seventeenth day, and an increase of serous effusion into pericardium 8 or 9 days after this. No complication.

Case 7.—Pericarditis very slight and partial. Patient died on second day of another disease. Mercury given every night for ten days before pericarditis came—then omitted. Two days after the omission pericarditis appeared. No mercury given after. Gums not affected.

Case 8.—Treatment first day. Gums sore second day. Early and free bleeding. Duration of disease four days. This was believed to be a case of pericarditis; but, as the physical signs were absent, the diagnosis is uncertain. It may have been only intercostal rheumatism. No complication.

Case 9.—Treatment on admission. Mouth sore on fifteenth day. Free bleeding. Friction-sound *diminished* in 6 days, and *ceased* in 9 days after ptyalism. No inflammatory complications.

Case 10.—Treatment began second day. Disease almost suspended during 3 days immediately after cupping on the second day. Salivation began on seventh and continued until twenty-first day. Friction-sound continued 4 days after salivation appeared, and 11 days in all. Endocarditis supervened on eleventh day, the mouth being very sore at the time.

Case 11.—Salivated for acute rheumatism. Three days after salivation, the mouth being still very sore, pericarditis appeared, and continued for 16 days. Venesection to 11 days before the pericarditis. Complication: Some endocarditis.

Case 12.—Treatment first day. Gums tender third day. Friction-sound suspended after application of leeches on the first day; returned *nine* days after gums sore, and continued 5 days after its return. An attack of pneumonia, and an increase of the rheumatism appeared simultaneously with the return of pericarditis, and whilst the gums were still affected.

Case 13.—Treatment on second day. Gums sore on sixteenth day. Friction-sound diminished the day after gums became sore, but did not cease till five days after. Complications: Anæmia, bronchitis acuta, pneumonia.

Case 14.—Treatment on first day. Salivated on tenth day. Friction-sound gradually diminished after salivation, and ceased 6 days after, having continued for 16 days. Complications: Endocarditis supervened 4 days after the mouth became sore; pneumonia; anæmia.

Case 15.—Treatment began first day. Salivation on second day. Friction-sound suspended during 3 days from the first day. It returned with more intensity 3 days after the mouth had become sore. Friction-sound continued 8 days after its second, and 13 days after its first appearance. Complications: Endocarditis; pneumonia; rheumatism. The two last diseases both increased after the gums were affected, and the rheumatism continued 40 days after.

Case 16.—Mercury given 8 days before, and gums became sore 11 days after pericarditis appeared. Friction-sound ceased about the time the gums became tender; but it had been gradually declining for several days before. Total duration, 11 or 12 days. The case was a mild one.

Case 17.—Treatment began first day. Salivation on third day. Six days after salivation friction-sound louder than at any other time, and signs of serous effusion still in pericardium. Friction-sound and rheumatism both continued 13 days after gums were tender. Complications: Roseola; endocarditis.

Case 18.—Treatment began ninth day. Gums sore on nineteenth day. Friction-sound ceased 2 days before gums sore. Case mild. Four ounces of blood only taken.

Case 19.—Treatment began on admission. Gums sore in 11 days. Death 2 days later. Pericarditis intense. Copious effusion of bloody serum, and thick false membranes. Complications: Endocarditis ac Pleuritis; lobular pneumonia; enlarged liver and spleen; anæmia. It is possible that the pericarditis may have existed 3 weeks without treatment before admission.

Case 20.—Treatment began fourth day. Friction-sound ceased on eighteenth day. Calomel given during 19 days; but without affecting the gums. Complications: Pneumonia from the commencement; endocarditis from the fourteenth day.

Case 23.—Treatment began fourth day after admission. Gums sore on eighth day after. Pericarditis *may* have been present from the first; but friction-sound appeared only the day before the gums were sore, and continued for 19 days after. Complications: Phthisis; double pleurisy; erysipelas of the face; pleurisy supervened 6 days, and erysipelas 30 days after the gums became sore.

CLASS II.

Case 21.—Pericarditis suspended from second or third day, (and before mercury was given,) to twenty-sixth or twenty-seventh day, or 10 days after the gums had become sore. The pericarditis then continued 15 days longer, calomel being given during the last 12 or 13 of these days. Complications: Pneumonia appeared 12 days after mouth sore, and continued for several weeks; pleuritis came on 20 days after mouth sore, and whilst calomel was being given again.

Case 22.—Pericarditis on admission. Mercury given same day. Gums sore on fifth day. Morbid sound (probably friction-sound) continued, and was present 23 days after. It is not mentioned later Patient died 52 days after this, (*i.e.*, 75 days after mouth sore). Bloody serum in pericardium. Heart soft. Complications: Bronchitis; convulsions; diseased kidneys.

Case 24.—Mouth kept sore for a month,—from September 27, to October 25. Mercury then omitted. November 26, (*i.* e., a month after,) pericarditis and pleuritis of left side appeared. Death followed after 6 days. No bleeding, mercury, or special treatment for these affections. The patient died of other and more urgent diseases.

Case. 25.—Admitted with pericarditis and double pleuritis. Died on third day after. Mercury given. Gums not affected.

Case 26.—Admitted with pericarditis. Died on second day after from coma. Mercury given. Gums not affected. Complications: Emphysema, left side; hæmatemesis; ulceration of colon; gangrene of lungs; Bright's disease.

Case 27.—Pericarditis probably existed on admission. If so, it continued 30 days, and was then cured, although the patient died of other diseases. Mercury given on admission. Mouth sore in 4 days. Mercury given again on 22nd, and mouth sore on 25th day. Friction-sound less in 21, and ceased in 26 days after first ptyalism; or it became less on the same day, and ceased on 6th day after the second ptyalism. Complications: Erysipelas of face and laryngitis, or œdema of the glottis, appeared after two salivations,—viz., 3 days after the second, and 18 days after the first; pneumonia; pleuritis; softening of the brain with hæmorrhage; Bright's disease.

Case 28.—Admitted with pericarditis, of uncertain duration. Mercury given. Gums not affected. Died on 4th day. Complications: Double pleuritis; pharyngitis; hypertrophy V. S. cordis; necrosis of tibia; abscess in antrum maxillare.

Case 29.—Admitted with pericarditis and double pleuritis, of uncertain duration,—perhaps 2 weeks. Died on third day. Mercury given. Mouth never sore.

Case 32.—Admitted on 5th day of illness, with acute pericarditis and severe double pleuro-pneumonia. Died fifth day after admission. Calomel given every few hours. Gums never affected. Pericardium filled with serum. Soft pulse membranes.

Cases 33 and 34.—No history.

In the following cases, no treatment whatever was adopted for the pericarditis, the disease not having been discovered during life:—

Cases 30, 31, 35, 36, 37, 38, 39, 40.—In none of these cases, unless it be in case 35, and perhaps 37, is it probable that any treatment would have affected the result.

Case 38.—Patient admitted for empyema, which continued until his death, 9 months after. Peri-

carditis supervened perhaps 12 weeks before death. Was treated in commencement of illness for pleuritis, by bleeding and salivation. Copious effusion of bloody serum, and very thick, rough, false membranes found in pericardium.

The following tabular analysis of the above cases shows the duration of the cases of pericarditis corresponding to the day of the disease on which mercury was first given :—

Day on which Mercury was given.	Average duration of the case. Days.	No. of cases.
1st	15½	9 (case 8 is excluded)
2nd	15	2
4th	18	1
5th	24 (or 60)	1
10th	17	1
11th	17 (or 32)	1

Again. The cases in which mercury was given within the first four days (12 in number,) had an average duration of about 15⅓ days. Those in which this remedy was given later, (4 in number,) had an average duration of 20½ days.

The following Table will show the duration of the cases, corresponding to the day on which salivation occurred.

Day of salivation.	Average duration of disease. Days.	No. of cases.
1st	15⅓	3
2nd	13	1
3rd	16½	2
7th	10	1
10th	20	2
11th	11	1
16th	22	2
17th	17	2
Mercury given 19 days but no salivation	18	1

Or, those salivated within the first four days, (7 in number,) had an average duration of 15 5-7th days. Those salivated later, (8 in number,) had an average duration of 17⅜ days.

If we estimate the effects of mercury in the same way as those of bloodletting, the remedy will appear, at first sight, to have been very beneficial, inasmuch as the duration of the disease was less by five days when mercury was given within the first four days, than when it was given at a later period. But there is one source of fallacy and of difficulty to be kept in mind, namely, that all the patients who took mercury were likewise bled, and, in every instance but two, (Cases 6 and 15,) the two remedies were first employed on the same day. It is, therefore, very difficult to determine to which remedy the benefit observed was due, or whether to both, and in what proportion to each. Without attempting to decide the question, one or two arguments may be mentioned, which would seem rather to favour the view, that the benefit was more due to bloodletting than to mercury.

1. If the benefit were due to the mercury chiefly, and if *salivation* be essential to the full effect of mercury, then the duration of the cases should be shorter in proportion as *salivation* occurred earlier. Now this is not the fact; for those salivated within the first four days had an average duration only two days less than that of those salivated later; whereas those to whom mercury was simply given within the first four days, (without regarding the period of salivation,) had an average duration less by *five* days than those who took it later. The bloodletting coincided with the first *administration* of mercury, but not with the first appearance of salivation; and the result just stated is just what might be expected, on the supposition that the benefit was chiefly due to the bleeding. This, imperfect as it may be, seems to be the only method we possess of separating the effects of the one remedy from those of the other.

2. If the production of salivation had anything like the marked influence in arresting inflammation, and in promoting the removal of its products, which it is currently believed to possess, the duration of the cases of pericarditis after salivation ought to have been much less than it really was. This statement can only be appreciated after a careful perusal of the details of the cases. The general results may be classified as follows :—

1. Salivation was not followed by any speedy abatement of pericarditis, in 16 cases :—
   Class I.—Cases 1, 2, 3, 4, 5, 6, 9, 10, 11, 12, 15, 17, 23.
   „ II.—Cases 21, 22, 27.
2. Salivation was *followed* by pericarditis in 5 cases
   1st Class.—Cases 11, 12, 23.
   2nd Class.—Cases 24, 27.
3. Salivation was followed by an increase in the extent and intensity of the pericarditis in 3 cases. Class I. Cases 15, 17. Class II. Case 21.
4. Friction-sound ceased two days before the mouth became sore, in 2 cases: Case 18, which, perhaps, ran the same course as if not treated at all; Case 2, the patient died two days after the mouth became sore, and four days after the cessation of friction-sound, from adhesions.
5. Salivation was followed by a speedy *diminution* of the friction-sound in *two* cases—13 and 14. It did not cease, however, in less than five and six days more, nor until it had run its full ordinary course, viz., twenty-one and sixteen days.
6. The pericarditis ceased soon after salivation, in 2 cases (16, 8). In one of these (16), the disease was mild, the friction-sound had been declining for several days before the gums were affected, and its duration was not less than eleven or twelve days. In the other (8), it is not certain whether the disease was pericarditis, or only intercostal rheumatism.
7. Mercury was given, but no salivation was produced, in 7 cases :—
   1. It was omitted two days before the pericarditis appeared, (Case 7).
   2. Salivation could not be produced, and yet the case went on favourably. Mercury given for nineteen days, (Case 20).
   3. The pericarditis was fatal before salivation occurred. (2nd Class.—Cases 25, 26, 28, 29, 32.)
8. No mercury was given, nor other treatment adopted, in 8 cases. (Class II. Cases 30, 31, 35, 36, 37, 38, 39, 40.)

The following cases exhibit the occurrence of various internal inflammations, in the course of pericarditis, and *after* the production of salivation; and they deserve to be recorded as materials to aid us in determining the effects of mercury :—

Endocarditis supervened after the occurrence of salivation. Case 5, 21 days after; Case 10, 4 days after, the mouth being still sore; Case 14, 4 days after, the mouth being still sore.

Pleuro-pneumonia supervened after salivation. Case 4, 3 weeks after, and as the pericarditis declined; Case 5, whilst the mouth was sore; Case 12, 9 days after, the gums being still sore; Case 21, 12 days after, and continued for several weeks.

Pneumonia increased after salivation. Case 15, on 13th day after.

Pleuritis followed after salivation. Case 23, double pleuritis came on 8 days after mouth sore; Case 24, one month after; Case 21, 3 weeks after salivation, and during a second course of mercury.

Pleuritis continued unabated after salivation. Cases 5 and 38.

Erysipelas followed salivation. Case 23, 30 days after; Case 27, after two salivations, 18 days after the first, and 3 days after the second.

Rheumatism continued long after salivation. Case 5, continued 4 days after; Case 15, continued 40 days after; Case 16, continued at least 11 days after; Case 17, continued 13 days after.

Rheumatism ceased *about* the time the gums became sore. Cases 11, 12, 14.

Rheumatism was increased after salivation. Case 12, whilst the gums were affected; Case 15.

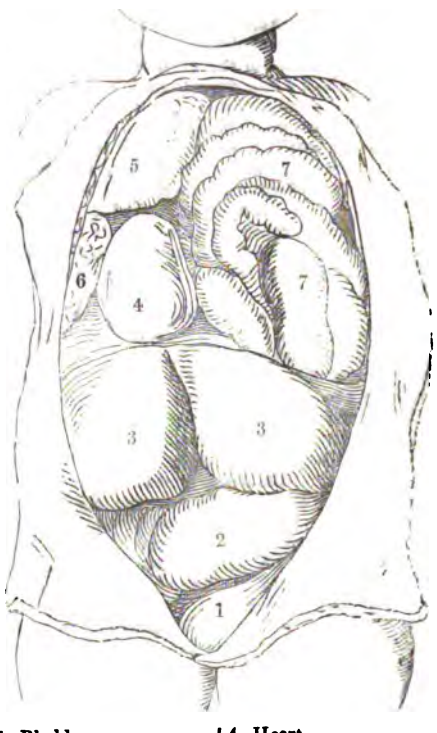
In the mass of these cases, the pericarditis seems to have run its course just as we may suppose it would have done if no mercury had been given. Inflammation of the pericardium, endocardium, pleura, and lungs often supervened when the system was under the full influence of mercury, and then ran their ordinary course. When the friction-sound diminished or ceased soon after salivation, it was only when, from the previous duration of the disease, it must have been approaching its usual term of existence. Pericarditis has been proved, by Louis and others, to terminate favourably, in many cases, without any treatment; and the course of the disease—if I may judge from my own observation and reading—is, probably, not very different in France and in this country, although the active treatment of the French consists of bloodletting chiefly, and does not include the use of mercury; whereas in England we almost always use both these remedies.

It may be objected by some, that the friction-sound is not a good test of the duration of the disease,—that the lymph thrown out may continue to generate the sound, long after the inflammation producing it has ceased. To this I would reply :— 1. That the commencement of the disease has not been fixed by this sound alone, but by the occurrence of pain and other symptoms, and physical signs as well. 2. I believe that no better general sign of the *termination* of the inflammation, than the cessation of the rubbing sound, can, probably, be found. In a great proportion of the cases, ending favourably, this sound will be found to cease, from the formation of adhesions, quite as soon as the inflammation ceases, and sometimes, probably, sooner. (See Case 2.) In a few exceptional cases, the sound is, probably, prolonged beyond the term of existence of the inflammation; but these cases have been allowed for, and considered as terminating when the pain, fever, and disturbed action of the heart have subsided. 3. The sooner the inflammation is arrested, the less will be the amount of lymph thrown out, the sooner will it be re-absorbed, or lead to adhesions, and, therefore, the sooner will the sound cease. Whether, therefore, the cessation of the morbid sound be a sure test of the actual cessation of the inflammation, in any *individual* case or not, it will, at least, be a fair test of the relative period of duration of the inflammation, among the *individuals*, in a *series* of cases.

(To be continued.)

CASE OF CONGENITAL MALPOSITION OF THE VISCERA.

By OCTAVIUS E. P. CHARD, Esq.



1. Bladder.
2. Descending Colon and Rectum.
3. Liver.
4. Heart.
5. Thymus Gland.
6. Right Lung.
7. Intestines.

On recently examining the body of a new-born female child, I was surprised to find that the abdominal cavity contained only a small portion of the intestinal canal. The liver occupied its usual position, as well as the stomach and duodenum, but at the point where the latter terminates in the jejunum, the intestinal tube passed directly into the left side of the thorax, by an aperture at the posterior

part of the diaphragm, there formed the large and small intestines, and, emerging by the same opening, descended to the rectum. On exposing the cavity of the thorax, the pericardium and its contents were observed to be more to the right than usual, the displaced bowels being situated on its left side. The left lung was about the size of a walnut, and lay in contact with the intestines, the latter having no special sac inclosing them. The right lung was small, and, of course, much compressed by the encroachment of the heart and mediastinum.

The child was well formed externally. It gave a peculiar shrill cry at its birth, breathed with a slight noise, and survived twenty hours.

The above sketch will convey some idea of the appearance of the displaced parts.

The species of congenital malformation, of which an example is here given, is, I believe, not common; still, there are various detached cases to be found recorded in periodical and other medical works. I have had an opportunity of perusing the descriptions of three such cases—viz., one by Dr. Montgomery, in his article on the Abnormal Conditions of the Fœtus, in the "Cyclopædia of Anatomy and Physiology," and two of earlier date by Dr. George Macaulay, in the first volume of the "Medical Observations and Inquiries."

The instance given by Dr. Montgomery agrees in most points with the one I have related. The abnormal opening of the diaphragm was on the left side, the displaced bowels lay in the left cavity of the pleura, and the left lung was smaller than "half the kernel of an almond," and solid in texture. The stomach, liver, and spleen, were in their natural situation. The preparation, which belonged to Dr. E. W. Murphy, is now in the Museum of University College, London.

In one of the cases described by Dr. Macaulay, the displaced viscera were also lodged in the left side of the thorax. They consisted of the stomach and the greater part of the intestinal canal, with the spleen and part of the pancreas; the duodenum dipped back into the abdomen to receive the biliary duct, but the intestine speedily returned into the thorax, with one end of the pancreas. The jejunum, ilium, cæcum, and greater part of the colon, lay in the pleura; the rest of the great intestine passing, with two or three turns, down to the anus.

In the second case, related by the same observer, the opening in the diaphragm was on the right side, and the small intestine, with a considerable portion of the liver, lay in the right pleura. The right lung was, of course, here the smaller, and the mediastinum and heart were pushed to the left. This is the less common condition, for, in by far the greater number of instances, the abnormal opening of the diaphragm and the misplaced viscera are on the left side.

In the first of Dr. Macaulay's cases the infant lived an hour and a half; in the second only three-quarters of an hour; and indeed, with such a serious encroachment of the abdominal viscera on the space allotted to the thoracic organs, the maintenance of life is scarcely to be looked for. Examples, however, are not wanting of individuals with a minor degree of the same malformation attaining to adult age. Such an instance is given by Sir Astley Cooper in the Medical Records and Researches. The patient, a woman twenty-eight years of age, died with symptoms of strangulated hernia. The transverse colon, with part of the omentum, was found projecting into the left cavity of the chest, through a circular opening in the fleshy part of the diaphragm, two inches in diameter. From the appearances after death, as well as the previous history of the case, it was inferred that the malformation was congenital. A case of a similar kind occurred to Petit, in which the patient was a man forty years old.

Wye, near Ashford, December, 1849.

SURGERY OF THE LATE WAR IN HUNGARY.

By Dr. GLÜCK, Surgeon-in-Chief to the Hungarian Hussars.

Having been called on to take part in the recent Hungarian war, first as Regimental Surgeon, and latterly as Surgeon-in-Chief to Hospitals into which the wounded alike of Görgey's army and those of the Austrians and Russians were received immediately after the battles, I had the opportunity of seeing and attending a great number of cases, which appear to me to possess sufficient interest to warrant their publication.

The frequent battles at Schwechat, Presburg, Altenburg, Raab, Comorn, Morr, Czorna, Thaz, Teth, Szolnok, Tisrafüred, Köresd, Kapolna, Pesth, Waitzen, and many other places, gave us opportunities for observation and for obtaining experience, which merely civil life does not supply. It was frequently the case, that in one and the same battle, all kinds of wounds were received. On the 3rd of August, 1849, at Snzomy, near Komorn, General Klapka made a *sortie* from the fortress. A simultaneous attack of 5,000 men of the centre took place, led on by Klapka, while the wings, 2000 strong, advanced at Georgey's command against the Austrians and Russians. Besides those killed of the Russian and Austrian troops, which amounted to 2500, we had 735 wounded, and among these were to be seen incised, punctured, lacerated, contused, common pistol, and gun-shot wounds, as well as luxations and fractures. Before making further mention of these and their treatment as well as the various amputations, dislocations, and trepannings, and the diseases which occurred in the Hungarian army, I would sketch some of those circumstances in which the surgeon and the wounded were placed, from the opening until the end of the war.

Political circumstances, with which the reader is familiar, having rendered necessary the raising and calling out of an Hungarian army, twelve battalions were formed, each numbering 12,000 men. These (called Honveds) were obtained by enlisting all able-bodied men from 19 to 25 years of age. Each battalion had two surgeons. The regular regiments and the Austrian battalions which were then in Hungary, as well as those ordered there from Austria, were provided with skilful and experienced surgeons.

The war may be said to have commenced in the month of May, 1848. From the large number of wounded continually requiring attention, we were obliged to avail ourselves of the services of surgeons in civil life in the hospitals. In October, 1848, the Hungarian army received considerable reinforcements, and while the continual skirmishes and pitched battles served to fill our hospitals with the wounded and dying, the cholera now broke out, and placed us in a still more harassing position. Until January, 1849, however, the army and hospitals were tolerably well provided with surgeons; but during the winter, very many of them died while in the performance of their duty in the hospitals, crowded, as they now were, with cholera and typhus patients, as well as wounded. Others of them were killed on the immediate theatre of the war. In May, 1849, the Austrians retreated from Pesth, leaving on the field about 6000 wounded and sick men, who were attended to by surgeons in civil life. Having taken Buda, we were compelled to minister to the these, besides those we found in the crowded hospitals of the country lying between Pesth and Raab, while the advance of the Russians on different posts rendered it necessary to transport the sick from those places in Hungary which had come into our possession.

In July we retreated from Pesth, pursued by the Russians and Austrians, taking our wounded with us, their devotion to the Hungarian cause, mingled with exasperated feelings towards their enemy, rendering them comparatively forgetful of suffering. The wounded were now being brought in from all parts to Arad, Szegedin, Maks, Kalvesa, &c., in such vast numbers, that surgeons could barely be found to attend them.

In anticipation of an engagement, we usually selected a place for carrying on our surgical operations. Whenever it was practicable, we chose the vicinity of a river, a grove, a single house, or the last house of the next village or town, or a railway station; but according as the army advanced or retreated, we were compelled to do the same, and change our position. Not unfrequently the cannon balls would far outstretch their mark, and fall among the wounded men, taking a life already placed in jeopardy, or maiming or killing those in attendance on the wounded; or perhaps the chosen house was burned with rockets while the wounds were being dressed, as in the engagements of Czorna, Thar, &c. At Morr one of our surgeons was killed, and another received five deep wounds on the scalp. Not unfrequently the surgeons were killed in the *decusse* of the battle, wearing the same uniform as the officers of the regiment in which they served.

The wounded were carried away immediately after a battle to the place chosen for their reception on sheets, paillases, or on wagons filled with straw, their wounds dressed, they were afterwards conveyed on the wagons to the hospital of the nearest town or village. Their number so frequently exceeded our worst anticipations, that we had not sufficient carriages at our disposal, and hence we had to leave several sufferers on the field. It sometimes happened, as after the battle at Thauy, that some of our hussars would come in on horseback without a hand, a shoulder, or a leg; and not unfrequently the wounded would have to walk several miles, many of them having had operations performed upon them. At the above-mentioned place, for instance, we had 65 men wounded, out of which number 11 underwent amputation, and immediately after it performed an eight hour journey.

At the hospital of Passa, we had, in all, 273 inmates; of these, 183 were wounded, and 54 were interns, besides 36 Austrians, whom I left there. Of this number of public-houses, as well as empty buildings, were occupied for this purpose. It occasionally happened, that in consequence of military disposition, those who were but slightly wounded, would be first attended to with care; while others, whose cases were of more importance, could scarcely secure any assistance.

In October, 1848, I attended our wounded men in an empty house, where not even straw could be obtained; while, at the same time, of those who were suffering from trivial injuries, 11 underwent amputation; 114 had received gun-shot wounds; 15 contusions; and 43 incised wounds and lacerated. I had here great difficulty in obtaining a sufficient number of weapons. Those who could, therefore, walked, and others crawled a distance of four miles to the nearest village, where carriages could be procured. When opportunity prevented, the wounded were transported on steamers or by railway. In the month of October, 1848, many hundreds were sent from Pesth, and in July of the next year, thousands were conveyed from Pesth to Szeged-Arad by steamers; others to Szolnok, by railway.

HOSPITALS.

Besides the regular hospitals in towns and villages, were fitted up temporary ones near to the scene of action. All diligently tended in the neighbouring villages. The cholera which, as I said, broke out in January, 1848, committed great ravages during the period of the war, and helped to fill our hospitals, destined for other purposes, with sick. The more we retreated, the more we had to contend with. The various hospitals in towns and villages contained at one time, some as many as 1400; others 1000, 4000, 6000, and so on, while being often in but a small village, more than 2000 patients were to be found. At Komorn, when Klapka left it, all the hospitals were crowded with cholera cases and wounded men, while the fortress contained no less than 4916 sick and wounded. The mortality from cholera there ranged from 30 to forty a day. The fortresses of Arad, Katz, and Peterwardein were in the same state, and at Buda we had 2000 sick in hospital during the time it was being bombarded.

To the patriotism of the ladies we were indebted for liberal supplies for dressings. In February, 1849, the sister of Kossuth inspected a hospital containing 800 sick; and her unwearied attention to the sufferers was such that she was soon appointed to inspect all the hospitals of Hungary.

(To be continued.)

BATHS AND WASHHOUSES.—The Directors of the Exeter Water Company have agreed to supply the baths and washhouses in that town with water gratuitously. This is greatly to be commended. The managers of similar establishments at St. Martin's-in-the-Fields pay 160*l.* a-year for water.

HOSPITAL REPORTS.

ST. BARTHOLOMEW'S HOSPITAL.

EXCISION OF A TUMOUR

SITUATED IN THE INTERIOR OF THE PAROTID GLAND, BENEATH THE BRANCHES OF THE FACIAL NERVE.—PERFECT RECOVERY.

The following operation, one of singular interest, and highly creditable to surgery, fairly comes within the scope of these reports, since it was performed within the walls, though not publicly in the wards of St. Barthomolew's Hospital. The subject of it is a well known and highly-esteemed member of the Medical Profession, practising at Salisbury. Abont five years ago, this gentleman discovered a small, elastic, moveable tumour on the right side of his face, just below the zygoma. At first he took little notice of it; but, finding that it gradually increased in size, he subsequently came up to London to consult the surgeons of the old Hospital in which he had been educated. They were unanimously of opinion, that the tumour was one of a class commonly called parotid, and that, since it was progressively enlarging, it ought to be removed. Upon this opinion, however, the gentleman in question did not feel disposed to act, because the tumour caused him no pain or inconvenience. In this respect, his decision was probably biassed by the fact of his being himself the patient,—for we are sure he would have been the last man in the world to have allowed the slightest weight to such an argument in any other case but his own. In this state of uncertainty, he suffered five years to elapse before he made up his mind to part with the tumour. Meantime, it had slowly grown larger, so that it has now attained the size, and pretty nearly the shape, of a large walnut, with the long axis in the direction of the masseter muscle. In other respects no other change had taken place. It was still elastic and moveable, yet not so moveable that the ramus of the jaw could be felt behind it. This circumstance led to the inference that a part of the tumour at least was probably embedded in the substance of the parotid gland.

The operation was performed by Mr. Stanley, ably assisted by Mr. Paget, whilst the patient was kept under the influence of chloroform by Dr. Snow. An incision was made over the long axis of the tumour. A very little dissection was sufficient to show that the tumour was seated in the substance of the parotid gland, and that the primary branches of the facial nerve not only crossed in front of it, but that they were also firmly united to it. This circumstance, of course, complicated the operation exceedingly. To remove the disease without dividing the nerves, it was necessary to cut it away piecemeal. On the first incision into it, there escaped a quantity of thin fluid; thus it proved to be a cyst, and its walls immediately collapsed. The subsequent part of the operation was indeed a very tedious and delicate affair, and can be easily imagined by those who are familiar with the dissection of the portio dura in the parotid gland. While the operator was cutting out, bit by bit, the several portions of the cyst, which extended irregularly in this and that direction, the nerves were stretched and drawn out of the way by hooks, and therefore unavoidably rather roughly handled. It was curious to see how one or other of the muscles of the face twitched, as this or that branch of the facial nerve was disturbed. Every part of the cyst having been at length removed, there remained a wide gap in the situation of the parotid gland, and an excellent display of what we had never before seen in the living subject, the so-called *pes anserinus* of the portio dura.

From a letter recently received from the patient, we quote what remains to be told of the case, as well as a very graphic account of his sensations during the inhalation of the chloroform.

"For the first four or five inspirations, I felt a slight sensation of constriction opposite the first bone of the sternum. This was followed by an overwhelming noise resembling the combined sound of many threshing machines or steam carriages, so near as to bewilder me. This increased until a sudden shooting sensation passed down all the limbs, conveying the conviction that sensation was gone; and, lastly, an agreeable ecstasy, ending almost instantly in complete unconsciousness, from which I never recovered for an instant until I awoke in bed, an hour and a half from the commencement of the operation. I suffered for some hours from vomiting, for three days from nausea, head-ache, aching of the knees, and general *mal-aise*, and from a distressing sensibility and want of command over the expression of my feelings. These feelings all ceased instantly on the free action of my bowels. The wound healed in its upper half by the first intention. There was slight venous hæmorrhage on the second night, which Mr. Paget arrested by the removal of the sutures and cosgula, and by applying cold-water dressing. On the fifth day after the operation I left my room, and on the thirteenth I returned to Salisbury. Saliva escaped at first from the wound on taking nourishment; this has gradually ceased, and on this, the thirtieth day after the operation, the wound is entirely closed. The last drop of saliva continued obstinately to escape, until my friend Mr. Wilkes, house surgeon to the Salisbury Infirmary, proposed and practised an injection of a solution of two grains of the nitrate of silver to an ounce of distilled water, when it ceased entirely. The only existing evidence of my having undergone this operation are the cicatrix, a difficulty in winking with my right eye, and a very slight difference in the distance between the eyelids, those of the right eye being the most separated, and even these results of the bruising of a branch of the portio dura are rapidly subsiding."

SUPPURATION IN THE BURSA OVER THE PATELLA,

ACCOMPANIED WITH INFLAMMATION OF THE KNEE-JOINT, AND THE CELLULAR TISSUE AROUND IT.

E. Grimes, a housemaid, eighteen years old, was admitted into Sitwell ward, under the care of Mr. Stanley, on the 30th October, 1849. She was suffering from acute inflammation of the bursa, over the patella, and the cellular tissue in the neighbourhood. There was also considerable effusion into the knee-joint, so that the patella was elevated from the condyles of the femur. The disease had been about a week in progress, and had created much general disturbance. The treatment after admission consisted in a free application of leeches to the joint in the first instance, with the internal administration of saline purgatives. After a few days the bursa suppurated, and was freely opened. This relieved the symptoms, and the case went on subsequently most favourably. The patient was discharged cured on the 19th November.

The chief point of interest in this case is the coexistence of the two affections,—inflammation of the patella bursa, and inflammation of the knee-joint. It is a rare occurrence.

PROGRESS OF MEDICAL SCIENCE.

FRANCE.

(Paris Correspondence.)

NEURALGIA AND RHEUMATISM TREATED BY COLD DOUCHES AFTER SWEATING.

At Bellevue, near Paris, there is a fine establishment, in which everything of practical value connected with "the water-cure"—be it hot or cold—is applied to the treatment of various obstinate affections. The advantages obtained from a rational employment of several powerful agents, as distinguished from the empirical use of one alone, are very great. They were pointed out in an excellent Memoir which M. Fleury presented at the last meeting of the Academy of Sciences. The Author selected forty-six cases, observed at the establishment during the last four years, and from their results deduced the following conclusions:—

Five patients, labouring under attacks of acute neuralgia from four to fifteen days, (facial, intercostal, sciatic,) were cured by one to three applications of the cold douche, both general and local, employed after the use of the dry stove, which had produced copious transpiration. Here the revulsive action of heat followed by cold was much more energetic than that of flying blisters or the cautery.

Eleven patients, attacked by acute muscular rheumatism, fixed in its seat and very severe, were rapidly cured in the same manner.

In *four* cases of obstinate neuralgia, which had resisted every known method of treatment for four to ten years, a cure was obtained by cold douches (general and local), sometimes preceded by the use of the hot-air bath. The duration of the treatment varied from one to six months, and its average was three months. *Three* patients who for five to fifteen years had presented, in the most marked degree, that *ensemble*, of symptoms known under the title of "nervous accidents," and who had been reduced by them to the lowest state, in spite of medical art, were cured in the same manner. Here, however, the treatment was continued from seven to eighteen months, and the average duration was more than a year.

Finally, in twenty-three cases of chronic muscular rheumatism, which had resisted every species of treatment, and the most celebrated mineral waters of Europe, the cold douches after sweating effected complete cures. The average time of treatment was four months; the minimum one month; the maximum seven.

Here, it must be confessed, we have a rational method of treatment, applied according to the rules of art, and as successful as the miracles of Hydropathy.

MODE OF ACTION OF CHLOROFORM, ETHER, &c.

M. Robin is of opinion that sulphuric ether, chloroform, and other analogous substances, produce their deleterious effects on the œconomy, by modifying the blood. M. Robin was led to this idea originally, by reflecting, that substances which enjoy the property of preserving animal matter from putrefaction, do so by preventing the matter from undergoing slow combustion at the ordinary temperature. Hence, if these substances were introduced into the circulation during life, it seemed not improbable that they would oppose the slow combustion which takes place in the blood, and, finally, give rise to asphyxia. Being desirous of ascertaining the precise symptoms which precede this kind of death, and also those that accompany it, the Author gradually reduced the quantity of oxygen supplied to certain animals, until he suppressed it altogether. During these experiments he ascertained that the quantity of life is proportionate to the quantity of combustion, and hence concludes that the agents above mentioned, if they exercise the same action on the blood as they do on animal matter, must diminish the quantity of life, that is, sensibility and contractility, at the same time that they diminish the quantity of combustion. Hence, according to the dose, they become sedative, capable of producing insensibility, or even death, from asphyxia.

Applying these remarks to ether and chloroform, M. Robin is inclined to admit, that when introduced in sufficient quantity into the blood, they oppose its combustion—that is, its change from venous to arterial; and he also thinks, that their anæsthenising effects depend in great measure, if not entirely, on this circumstance. Experiment has proved this, and enables the Author to affirm, that the action of these substances on animal matter is precisely that which has been just mentioned. After death, they preserve animal matter, in the most perfect manner, from every species of putrefaction, or, in other words, from combustion by moist oxygen; and this preservative action is exercised by sulphuric ether and chloroform either in the liquid or gaseous form, or by water, containing only a small proportion of these substances in vapour.

Finally, it would seem to be proved, by the researches of M. Robin—at least the Author regards it as proved—that, independently of all nervous influence, very small doses of ether and chloroform neutralise the action of moist oxygen on the blood, and on animal matter generally; and that, when introduced in sufficient quantity into the circulation, they oppose, more or less, the oxygenation of the blood, thus powerfully contributing to, if not entirely causing, the symptoms of anæsthesia which accompany etherisation.

ALIMENTATION.—GELATINE.

The question of alimentation, brought officially under the notice of the Academy of Medicine, has again introduced the subject of gelatine, and given rise to a remarkable report, the substance of which I transmit, because this Report must long constitute an authority on the question. Whether considered physiologically or economically, it is one of the very highest importance, yet, I fear, has not yet re-

ceived a satisfactory solution in either point of view. In France, as well as in England, economists and physiologists have been long in search of a cheap article of diet. To supply the poor with sufficient food at the cheapest possible rate, was the problem laid down by the economists, and the physiologists fancied they had solved it with the gelatine contained in bones. To the famous digester of Papin we owe the facility of obtaining this substance in large quantities; and the idea of applying it to alimentation was quickly seized by many of the French chemists, who flattered themselves that *one* pound of bones would go as far to make good soup as *six* pounds of meat. The digester, however, spoiled the gelatine, and it would probably have been abandoned as an article of diet, had not M. d'Arcet, in 1817, discovered a better mode of extracting it, by means of steam. This new preparation assumed the imposing name of "alimentary gelatine." M. d'Arcet announced, that he could now "turn four oxen into five." The Old Academy of Medicine lent its approbation to the theory, without sufficient examination of the subject, and gelatine soup became the prevailing diet of the day. Enormous sums of money were laid out on establishments in every part of France, and the sick as well as the poor were submitted to an infusion of gelatine, every ounce of which was supposed to represent thirty ounces of meat. Experience soon overthrew the hopes of the cheap soup men: numerous complaints were made by the physicians attached to the Hôtel-Dieu; the poor refused to fatten on the new diet, and the theory began to fall into disrepute. The Academy of Sciences now took up the question seriously, and, after having examined it for ten years, produced the well-known report of M. Magendie. The Academy of Medicine, to which the same question had been submitted, though at a later period, could not decently act with greater dispatch. It took ten years, likewise, and at the expiration of that period brought forth the report to which I have already alluded. In this complete document, the reporter, M. Berard, commences by asking two questions—"Can gelatine, extracted by any of the usual processes, be employed with advantage for the alimentation of man?" "Can a certain quantity of gelatine be substituted, in making soup, for those soluble matters which a given quantity of meat would have contributed to the soup?"

Before appealing to experience, the only certain test in matters of this kind, M. Berard presents a few remarks of a theoretical nature. Thus we might *à priori*, have reasonable doubts of gelatine forming a good aliment. In the first place, it differs in several respects from the other azotised substances, which contribute to the support of man. Our organs, as is well known, do not contain any gelatine; but merely certain substances which are capable of being converted into gelatine, either by the chemist, or during the process of cooking. We have no proof whatever that this *artificial product* can be re-converted into organic tissue by digestion. Besides, gelatine is not a compound of protein; it does not contain any sulphur or phosphorous; and we may hence conclude that it is incapable of being transformed into muscle, brain, fibrin, albumen, or any of those elementary matters which contain the two substances just named. But experience has determined the question in a manner which may be regarded as conclusive. The experiments of MM. Edwards and Balmac were the only ones which lent any authority to the idea of gelatine being available as a good aliment; but the conclusions drawn by these physiologists have been completely overthrown by the more careful researches of the Academy of Sciences, of the Holland Institut, of M. Dounê, M. Dufícholin, and M. Devienne, Apothecary to the Hospital of St. Denis. But, it may be asked, "if the gelatine contained in meat, and that extracted from bones be, chemically speaking, one and the same substance, why should they not be equally nutritious?"

To this the reporter answers, that meat contains several other matters besides gelatine, which are extracted by water. Thus, Berzelius showed, that if we treat a watery extract of meat with pure alcohol, we obtain two azotised substances,—one of which is precipitated by the chloride of mercury, the other by acetate of lead; and, in addition to these, there are several other extractive principles; for example, *zomidine*, &c. Ozmazome is a compound of many of them; and the *creatine* of M. Chevreul exists in meat broth, but not in that made with gelatine.

Finally, it may be asked, does the insufficiency of gelatine, as a nutriment, depend on the fact of its being badly digested, or, because the product of its digestion, is not a substance fit for nutrition? To this M. Berard replies, that gelatine is incapable of being digested like other albuminous matters, and concludes his report with a series of resolutions, the sum of which is, that gelatine presents no advantage, as a nutriment, on the score of economy, and that its preparation in public establishments should not be encouraged by the State.

In the short discussion which followed the reading of this report, M. Gaultier remarked, that the only substance which could be employed *singly* for the purpose of nutrition was gluten; and, in support of this, M. Villermé mentioned a curious fact that occurred during the war in Spain. The division to which he was attached, had been compelled for eight or ten days to live on animal food exclusively; the soldiers were soon attacked by diarrhœa and other disorders, which did not disappear until the diet became mixed.

IRELAND.

[Dublin Correspondence.]

THE PROVINCIAL COLLEGES.

The anxiety for the success of the Provincial Colleges remains unabated; despite the dreadful jealousies that surround them on every point, they seem, however, to continue their onward course. In Cork, Sir Robert Kane has been assailed, for some rather injudicious remarks with respect to the Colleges of Louvaine and Ghent. In Belfast, the object of the Colleges, has been set forth in no very flattering terms; while in Galway, the most malicious mis-statements have found their way into circulation, representing the scholars lately passed there, as those rejected in Belfast. As straws indicating the wind, such things portend anything but favourably for the Institutions. Let the Government, however, but remain firm, which it is determined on, and such things will pass away. As Medical Schools, it is, perhaps, to be regretted, that the Colleges have been severed from the parent trunk; yet the high character of the different Professors, and the good feeling generally entertained in Dublin towards them, reconcile one to the change.

PNEUMONIA FROM COD-LIVER OIL.

The value of cod-liver oil as a remedial agent, and its many characteristics, are so well understood at present by the Profession, and so generally recognised, that it appears a little superfluous to allude to them at any length. A point not long since mooted, however, by Dr. Benson, with respect to its exhibition, and not suspected very generally, is of considerable interest. The oil has long been a favourite medicine in Dublin, so that ample opportunities have been afforded of comparing the experience of the different practitioners who have used it. As early as the year '44, Dr. Graves tried it, with the most marked benefit, in some cases of cachexia; and Mr. Wilde, who had seen it used previously in Germany, tried it extensively, too, in cases of pannus, long-continued ophthalmia, granular lids, and analogous eye-cases. The other chief medical men, too, have had reason to be satisfied with it; and the indefatigable Donovan has given us its history and various properties and modes of preparation, with which every one now is quite familiar.

Nearly a year ago, it seems, Dr. Benson prepared a paper on the uses of the oil, but press of other business prevented his making it public. Possessed of such powers of invigorating the system, it did not appear to him very extraordinary if, under particular circumstances, the oil might undo the very thing it was intended for; in other words, might induce a congested condition of the lung, and induce pneumonia. Accordingly, in almost every patient dying of phthisis, taking the oil, which he has examined, he has found a congested state of the lungs, as he expected, not only near the tubercles, but through the entire of both lungs. Three marked cases are cited, in which he began with drachm doses, carrying it up, however, to an ounce and a half in the day. Dr. Benson, with the majority of practitioners, considers the oil quite invaluable in these cases; and perhaps the caution which he suggests will be of use, though it is, perhaps, questionable what part the oil really bears in the phenomenon. At the Surgical Society, where the paper was read, Dr. Bagot corroborated, to a certain extent, Dr. Benson's views; and Dr. Spear said, he had met pneumonia of both lungs traceable to the same cause; hœmoptysis, too, as remarked by Dr. Kennedy, being not unfrequent also.

It seems a matter of no uninteresting discussion, (if the facts be as suspected by Dr. Benson,) what part the action of the oil bears in the inducing this inflammatory state of the lung. It is, perhaps, too much a custom, when a patient is made to take the oil, to look on it as a last resource, to the neglect of all other means; and, as well remarked by Dr. Benson himself, the apparent symptoms improve much quicker than the physical signs; in other words, the tubercular irritation and inflammation are allowed to go on, under the false show of returning health. In such a state of things, it is not difficult to imagine even the sound parts of the lung getting one homogeneous appearance of engorgement, independent of the normal action of the oil, which every practitioner must confess is most beneficial. The observation of Benson, is one of deep practical value, and may be the means of taking this medicine out of that *terra incognita* that divides mere empiricism from true practical medicine, and lead to a true study of its real action on the animal economy.

IRISH MEDICAL CHARITIES.

A highly valuable Report has been just furnished to the House of Commons, recommending in the strongest terms, among other changes, that a separate rate for the support of the sick, aged, and impotent, be available at all times, and that it be forthwith estimated and struck, thus preventing the highly valuable medical charities through the country from falling to pieces. Parliament of course must sanction the arrangement, and it is only hoped that too much of its time may not be frittered away by more noisy, but really less called for measures. It would be desirable to see the medical men of Ireland "pronouncing" on the exact wants of these institutions. It would be more practical than countenancing in any way our late political hurricanes, so much to be regretted.

SELECTIONS FROM FOREIGN JOURNALS.

PROOFS THAT IT IS ONLY THE ORGANS OF TOUCH WHICH INFORM US OF THE SENSATIONS OF WARMTH, COLD, AND PRESSURE.

By E. H. WEBER.

That this question has not been previously decided is mainly due to the manner in which the skin, which is the seat of the sense of touch, surrounds all the inner parts, which are not. Thus it becomes difficult to separate the share taken by these latter in the production of the sensation.

1. The first means of deciding this question is that offered by the results of accident or surgical operations, in which a portion of the skin (the organ of touch) has been destroyed. The author and his friend, Dr. Günther, Professor of Surgery in Leipzig, instituted observations on three persons in whom a large portion of the skin had been destroyed by a burn, and had not advanced so far towards healing as to offer a renewal of the sense of touch.

Two metallic spatulas were dipped in water of different temperatures, so that one had a heat of 48° to 54½° Fahr.; the other of from 113° to 122°, and the surface deprived of skin was quickly brought into contact with these successively. To the question, whether the body in contact was warm or cold, these persons gave quite as often the wrong as the right answer; so that one or the other thrice

maintained that he was being touched by the cold body when it was the warm, and the reverse.

When these experiments were repeated on neighbouring portions of sound integument, the temperature was quickly and certainly detected.

When the spatula was in one instance made somewhat warmer, and brought into contact with the surface devoid of skin, the patient felt pain, which was not the case in the previous experiments.

Thus, from these experiments, it results, that these patients could not distinguish warm and cold with those parts in which the skin provided with the sense of touch had been destroyed; while heat beyond a certain degree produced pain.

2. Another means towards determining the question is afforded by the inhaustion or injection of a large quantity of warm or cold fluid into the stomach or intestinal canal.

The lips, the tongue, the teeth, the upper part of the cavity of the mouth, the palate, and the œsophagus are provided with the sense of touch; but thenceforward it is either lost, or at least becomes so imperfect, that one may doubt whether it is really present in the stomach and intestines. The author drank off rapidly a glass (8½ oz.) of water at 32° Fahr. The cold was felt in the mouth, in the palate, and œsophagus, but the gradual passage of the cold water into the stomach could not be discerned. In the gastric region there certainly was a slight sensation of cold; but, as it only occupied the situation of the anterior wall of the stomach, it is attributable to the large quantity of cold water having abstracted heat, not only from the stomach, but from the wall of the belly in contact with it, and through this, from the skin of this part. In an opposite experiment, the author drank quickly three (9 oz.) glasses of milk; the temperature of the first being 158° Fahr.; the third, 145·5°; and the second between the two. Heat was felt in the mouth, the palate, and the œsophagus, but nowhere else. At the moment when the fluid entered the stomach, there was a feeling which existed some time, but was not a sensation of heat, being mistakeable for cold. In order to discover the sensations produced on the large intestine by cold water, this fluid was in two subjects administered as an enema at a temperature of 65½° Fahr. In one instance, in which 14 oz. of water were injected, some movement, and a scarcely perceptible sensation of cold was felt in the belly; this gradually set towards the middle of the region. In the other instance, 21 oz. were injected, and nothing felt. In both instances, on the evacuation of the enema some minutes after, considerable cold was felt at the anus.

A lower temperature of 45·5° produced a very distinct sensation of cold in the immediate neighbourhood of the anus, but only a very feeble flutteriug in the bowels. Some little while after, there was a weak sensation of cold, chiefly in the anterior wall of the belly. This sensation remained after the return of the water; and hence it would appear due to a gradual extension of the cold from the water to the neighbouring parts, and to the skin,—a view which is corroborated by the fact, that, under these circumstances, the anterior wall of the belly had its temperature lowered by three degrees (Fahr.) And not only are the coats of the intestines insusceptible of the feeling of cold, but the muscles of the belly, which are provided with animal and not organic nerves, evince the same incapacity; for, were this not the case, there would be an unmistakeable sensation of cold produced on this extensive surface of contact.

So, also, the cavity of the nose may be completely filled with water without the entry of any into the pharynx; and, in such experiments, it may be observed, that the coldness of the water is only felt in the neighbourhood of the nostrils and in the pharynx, while, in the higher part of the cavity, which is richly provided with nerves, and subserves the sense of smell, it is not discernible, for the cold water gradually ascends on one side, and fills the other, without the slightest sensation of the kind.

When the water is very cold, to wit, 41° Fahr. a peculiar pain arises in the upper part of the fossa, and invades the regions of the forehead and lachrymal canals. But this feeling is altogether different from that of cold.

Re eated experiments of this kind verify the opinion, that we only appreciate heat, and cold, and pressure by means of the organs of touch; for, in the mucous membrane of the nose, which is the seat of smell, and also possesses a very lively common sensibility, the contact of a solid body does not produce the sensation of pressure, and the contact of cold water does not give rise to the sensation of cold.

3. A third method of clearing up the question is as follows:—In the Author's well-known experiments on the Touch, (during the year 1829,) he measured and compared the fineness of this sense in various parts of the body, and showed it to be of very different degrees in different situations; while those parts of the organ of touch by which we appreciate the comparative pressure of two weights were also more capable of distinguishing differences of temperature; and in both these respects the sense was the more acute, according as the nerve-filaments ending in a given extent of skin were more numerous. Heat, also, made a greater impression when the whole hand was plunged in warm water, than when only a finger was inserted; so that water of 100° Fahr. seemed warmer than the same fluid at 106°. Here again the impression is weaker when fewer nerve-fibres were acted on. So, in the case of vision, where the colour of a large space, previously visible enough, was rendered very indistinct by looking at only a small part of it through a tube.

This affords us a means of ascertaining whether we feel pressure and heat through the nerve-trunks lying in the skin, or whether this endowment is obtained through those ends of the nerves which, by means of special adjuvant organs, are made subservient to the reception of slight impressions in the function of touch.

In the case of moderate pressure by a weight on the forehead, it matters not whether it be placed on the hundred filaments of the supra-orbital and supra-trochlear nerves, which here cover the bone, or on a neighbouring part. Hence, we must suppose that such slighter pressure is only appreciated by the ends of the nerves, which are fitted thereto by a special apparatus; and is unfelt by the fibres in their course. A stronger pressure, however, can be felt by these latter; but it is as a pain, and not as a pressure, that they take cognizance of it.

The same holds good of the sensations of heat and cold. The parts of the skin in which lie trunks of nerves are not more sensible to moderate heat or cold than any other part: while a greater degree of either causes considerable pain. A mixture of ice and water in sixteen seconds attacks the ulnar nerve, and produces a severe pain; a pain which cannot be excited by the same cold, applied to any other region, and which has no resemblance to cold. So the tooth pulp is equally and similarly affected by water of 43° and 112° Fahr.: either result in a pain, exactly like that producible by pressure.

In short, as the sensations of light, sound, smell, and taste, all require a special apparatus at the extremities of their nerves,—so the sensations of heat, cold, and pressure, are only producible at the ends of the nerves of touch, where they are (probably) provided with an adjuvant apparatus, which is as yet unknown to us. Other sensitive nerves, and the trunks of the nerves of touch, are inefficient to the production of heat or pressure: when greatly acted upon, they can, at most, only give rise to the feeling of pain.—*E. H. Weber, in Müller's Archiv.* 1849; Heft. iv. pp. 273, 283.

[We will only add to the above abstract of this very important paper, that,—while it clearly establishes the tactile capacity and incapacity of the particular surfaces and parts of nerves alluded to,—it appears liable to objection in two respects; in theory and in fact: inasmuch as it makes out the sensations of heat and pressure to be distinct in kind from the ordinary sense of pain, and supposes a special apparatus to exist at the extremities of the nerves.

That these two sets of impressions are identical in kind, and differ mainly in degree,—that heat and cold require only higher delicacy of common sensation,—is rendered probable by the facts, that on the supposition of these being different senses, the irritation of the trunks and ends of the nerve would produce different impressions: while in opposition to this, we find that no other class of nerves has two functions; and that those of the special senses irritated in their trunks, produce the corresponding special sensations of light and sound.

The valuable essay of Czermak abridged in our Number of December 15, while it tends to contradict the notion of the special apparatus, still further corroborates the idea of the essential unity of pain and touch. It shows, that numerous and repeated branchings of nerve fibres exist; and the author's own experiments prove that an increased surface of nerve heightens tactile delicacy. Now, the enormous increase in this respect, which Czermak's researches prove, is, perhaps, quite sufficient to explain how a merely sensitive trunk becomes by its thus heightened susceptibility a delicate surface, alive to the slightest changes, and thus, cognizant of heat and pressure.]

POISONING BY BITTER ALMONDS.

Dr. Putelli states some instances in which the prussic acid contained in bitter almonds appeared to produce gastro-enteritis and peritonitis. He also alludes to corroborative cases, in which an antiphlogistic treatment was attended with success. Giaconini, however, is inclined to attribute the observed effects, either to the mere indigestible mass which the ingested almonds formed in the alimentary canal, or to the rancid oils given off from them; and not to the prussic acid itself.—(*Omodei Annali Universali di Medicina*, Vol. CXXIV., p. 278.)

PRACTICAL APPLICATION OF THE REDUCTION IN SIZE,

PRODUCED BY DEBILITATING INFLUENCES ON THE FŒTUS IN UTERO.

There appears little doubt that debilitating influences, such as repeated bleedings, low diet, &c., acting on the frame of a pregnant woman, impede the natural growth of the fœtus. M. Depaul recommends that advantage be taken of this fact in cases of moderately contracted pelvis. Two cases are related in which this method seems to have been very useful. In the least equivocal of the two cases, a woman, aged 26, with the antero-posterior and lateral diameter diminished by rickets, had had two deliveries in which instruments were used. The third delivery was premature. In the fourth, Depaul put his *régime* into practice. The patient was kept on low diet, and was bled at three months, at six months, and eight months and a half. She was allowed soups, greens once a day, ½ lb. of bread per diem, and meat once a week. She became pale and somewhat emaciated. At eight months it could be distinctly perceived that the fœtus was small. Delivery took place at the usual time without difficulty. The child was female, very small, weighing only 5 lbs., but was lively and did well. The mother, under a more generous diet, soon recovered her ordinary state of health.—(*L'Union Méd.*, Jan. 12.)

EPIDEMIC OF MUMPS AT GENEVA IN 1848 AND 1849.

By M. RILLIET.

In March, 1848, Lombard noticed a case of mumps which occurred in a young man arriving at Geneva from Paris. Shortly afterwards other cases were seen, and, in June, the disease had become common. It continued to prevail, without intermission, till March 1849; in December and January it was very prevalent. Prodromata were usually absent; when they occurred they lasted twenty-four to thirty-six hours, and consisted of pyrexia, with or without vomitings. Generally the attack began at once, with pain and swelling in the parotid regions, extending down under the jaw. Sometimes the skin became red over the swelling; once was erysipelatous, generally was, however, pale. The degree of swelling was variable; sometimes slight, sometimes enormous. Pain was sometimes very severe; in cases in which the swelling was great, some points were especially painful, viz., the temporo-maxillar articulation, between this and the mastoid process, and over the submaxillary gland; the pain was spontaneous, but was augmented by pressure; the lower jaw, in many cases, was in a veritable state of trismus; there was no salivation or angina. Lombard examined the saliva, but found no alteration. The swelling occurred generally in both parotids. General fever attended the swelling, and lasted two or three days. The duration of the malady was from five to ten days. The swollen parotid never suppurated. As far

as age was concerned, hardly any under 2 or over 40 years were attacked; yet one case was seen at 60 and one at 70 years. The following Table is given of 73 cases:—Under 2 years, 0; from 2 to 5 years, 7; from 5 to 10 years, 18; from 10 to 15 years, 19; from 15 to 20 years, 8; from 20 to 30 years, 9; from 30 to 40 years, 8; and from 40 to 70 years, 4. Of the 73 cases, 38 were male and 35 female. The disease did not occur twice. Rilliet observes that this epidemic has been the most severe that has ever been known in Geneva, and that evidently the longer the time between the epidemics, the more severe are they when they do come. Season exerted no influence upon it. During its prevalence a kind of roseola was common, which was suspected to be contagious.

The complications of the disease were, among men, affections of the scrotum and the testicle; among women, affections of the breast and ovaries, and in one case of the labia majora. The secondary orchitis hardly ever commenced by violent symptoms; generally a dull pain and weight was felt in the testicle, which when examined, was felt to be already enlarged. The tumefaction was at its height about the fourth or sixth day; it affected the body of the testicle rather than the epididymis, and was not attended by œdema of the scrotum. Only once did the epididymis present the hardness common in gonorrhœal orchitis; when it was swollen, it was always inconsiderably so, compared to the testicle. Sometimes on the third, sixth, or eleventh day the scrotum became puffy, with or without redness. The orchitis was sometimes accompanied by general febrile symptoms and vomiting. In twenty-three cases, the right testicle was attacked thirteen times, the left six, and both four times. Sometimes the orchitis was primitive, *i. e.*, did not follow the parotid swelling. Its occurrence was not connected with accidental falls or blows; it seemed, except in the cases just referred to, to be a true secondary lesion. The treatment of the orchitis was simple; cataplasms, compresses dipped in goulard, baths, and in three or four of the worst cases, bleeding. *(Gazette Méd.*, Jan. 12 and 19.)

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THE MEDICAL TIMES.

SATURDAY, FEBRUARY 2, 1850.

Discord and corruption, rottenness and death, mingle largely with the elements of all human institutions. Incessant change is the great law of nature; new forms are demanded by new ages, and thus the wheel of Time is kept in continuous movement. There is nothing permanent; and the great art of mankind is to give to the varying institutions which it rules and regulates that degree of perfection and harmony which the successive advances of ages require and sanction, without precluding, however, those further changes and modifications which succeeding ages may in their turn discover to be necessary, and naturally desire to engraft upon these existing systems. No method is so faultless but it may receive improvement; and no plan is so perfect that it can be said to be incapable of advantageous modification. But that there should be an unanimous consent among the various races of mankind as to their almost endless legislative measures, is as hopeless from the nature of the constitution of the human mind, as it must be remote from the genius of different nations. Look at the polity of the Spartans in their laws respecting theft, and contrast it with the sternness of the British code.

We have been led into these remarks by the perusal of the authenticated papers in this journal, by Dr. Bushnan, on the state of Medical Education throughout Germany. Described by his faithful pen, they present a state of legislation totally distinct from ours; and, if we judge not hastily, in one essential and paramount element, stand out in bold relief, as forming a model to other States—if not to be exactly copied, at least to be emulated. We allude to the perfect unity and harmony of the organisation of the Medical portion of the community, where it may be said to act as *one*, and by which means it offers to the public a degree of security and protection against the claims and pretensions of ignorant adventurers and rash quacks ready to prey upon the community and fatten upon the ignorance and stupidity of the masses—a security and protection totally unknown in our country. This point is essentially obtained by the law pervading the whole of the Germanic Confederation, by which it is decreed and enforced that, independent of any degree or diploma which an individual may have acquired in medicine—and which, in fact, is merely honorary—he cannot practise in any branch of his Profession, unless he has obtained the license and authority of the State; and this can only be acquired by undergoing the ordeal of a special and most formidable examination.

This we consider the point *par excellence* in the German system; one that might be adopted with infinite advantage in the British dominions, and that would constitute directly, as well as indirectly, a powerful lever, annihilating quackery in its very cradle.

It is scarcely necessary to remark, that in our country we possess abundant and most perfect means for the study of the healing art. Our Colleges are liberally endowed, and our Halls, and Museums, and Libraries amply supplied with all the appliances of science and of art. Dissatisfaction and malcontent, nevertheless, prevail, not silently but loudly—even fiercely among the mixed members of a mixed Profession. The pure Surgeon opposes the pure Physician trespassing upon his ground, and warring with him on his boundaries; while the Apothecary looks on the while, luxuriating in the contest—often eating the oyster, and leaving the combatants the shells. Hence, new establishments are proposed, new associations arranged, the *esprit de corps* of the Profession broken up and scattered, and lost amid endless wrangling and dispute. To-day hails a plan to be pulled down on the morrow, and the scheme of the coming day awaits the like fate in the worship of its successor. That such a state of action and of feeling is as detrimental to the well-being of the Profession, as it is injurious to the true interests of the public, there can be no question; and, since it is unhappily manifest that the Corporations will not reform themselves, why, we ask with all deference, should not the Government seek to heal these wounds, still these jarrings, and soothe these heart-burnings by one bold line of treatment. We have said before, that they did not ask the permission of Old Sarum to be placed in Schedule A, and let them now, and in like manner, establish a superior Government Board, to examine and to legalise the claims of each individual to act as a Practitioner of Medicine.

Let the existing Universities and Colleges maintain each their respective privileges and authority, save and except that their degrees shall be purely academical, and not authorising the recipient to practise. Let no man be admitted to the final examination for permission to practise, unless he previously has obtained, after examination, the recommendation of one or other of these Boards—a rule never to be dispensed with; and thus the public will have a band of able and competent men, reared for their service, and confirmed in their confidence by the searching examination of the State or Government Board, whose guarantee and sanction must be held as final and conclusive.

In a matter so vitally momentous as that of health, the public have a right to claim security for the qualifications of its Practitioners; and it is not necessary to remark, that the different degrees of Physician, Surgeon, and Apothecary, though they may be combined in some individuals, are not positively united in every Medical man. That there should be a liberty to adopt any branch of the Profession a practitioner may think proper, there cannot be a question; but that the public should have a guarantee for his thorough acquaintance with all and each of the thousand-and-one contingencies to which the human frame is liable—from the precincts of the cradle to the last scene of all—before he should be held as qualified for that charge, can only be a matter of doubt with those whose knowledge of the structure of the human body and its sympathetic organization, is most imperfect and incomplete. The division of the Profession into the two departments of Medicine and Surgery, though fraught with many advantages under one aspect, can never be contemplated by the enlightened medical mind as otherwise than a false view of the real nature of the healing art, and its ultimate philosophy. They are one and indivisible,—and he who assumes to be a good Surgeon, without a thorough knowledge of internal, or so-called medical disease, is in a position as false as the Physician who prescribes for a case of enteritis without a thorough knowledge of the kindred maladies, surgical as well as medical, for which it may be mistaken. The idea of a pure Physician is a metaphysical abstraction, which, perhaps, Berkeley might have acknowledged. Nor is the proposition of a pure Surgeon less absurd; for the art of Surgery never stands so brilliantly and prominently forward, as when it saves a limb from the painful necessity of the amputating knife.

REGISTRATION OF DEATHS.

It was stated in the Reports of some of the Superintendent-Inspectors of the Board of Health, that the Medical Officers who were appointed to make the house-to-house visitation during the prevalence of cholera, discovered the bodies of numerous persons who had perished without receiving medical aid, and

concerning whom, in some instances, nothing satisfactory could be ascertained respecting the diseases of which they had died. Of course, the presumption was, that such persons had been smitten by the epidemic, and Coroners' juries did not hesitate, upon the evidence of such information as could be procured, to return verdicts declaratory of this presumption. Notwithstanding, then, the great improvements that have been made during recent years in the mode of registering disease, and the fact of death, it is obvious that the system is imperfect, and that omissions exist, which an enlightened Government ought to correct.

A radical error is, that the Executive of Sanitary Administration is not *one* and complete in itself. There are too many Boards, each ignorant of the other's business, and without any machinery for the communication of intelligence, or opportunities of deliberating upon the important topics and events that necessarily occur in the course of the performance of their respective duties. We have a Board of Health, a Sanitary Commission, a Commission of Sewers, an Office for the Registration of Births and Deaths, a Poor-law Commission, and we scarcely know how many more administrative bodies, appointed for the avowed purpose of promoting the health of the people. During ordinary times, the Staff acting under the Poor-law Commission is considered competent for all the purposes of public hygiene; but, as soon as an epidemic arrives, a new Board is immediately demanded, and, by the time that it is framed and advanced into working operation, the epidemic has disappeared. This is the inevitable result of not maintaining in operation an efficient Board, having ample jurisdiction over all matters relating to Public Health. Such a Board would be ready to act on all occasions, and would be in a situation to organize the necessary staff of officers at the first outbreak of any deadly pestilence in our great cities. A Board of this kind would also save the country the heavy expenses which the improvisation of the petty Boards now in existence entail upon the Treasury,—and whose only obvious use is that of supplying snug seats for inconvenient claimants on the Government's patronage, and stepping stones to higher offices for the lordly aspirants to Ministerial power.

The Registrar General's office is, probably, the most valuable of all these legislative creations, and has solved more problems in relation to State Medicine than almost any institution of its kind that has existed in any country; but its practical value is considerably reduced, simply because it has no connexion with other Boards, whose functions depend upon the character of the facts with which it deals, and has no administrative power within itself. The Registrars acting under this Board, should be endowed with larger powers than they now hold, and should be required to visit and certify to the fact of death in all cases. The loose returns that are now occasionally made would be thus avoided, and even the blunders of Coroners' Juries to a considerable extent corrected. To effect this end, however, it would be necessary that the Registrar should be a Medical man. The scandal of appointing chemists, grocers, undertakers, and parish clerks to such offices would be thus removed, whilst the efficiency of the office would be greatly increased.

"The wisdom of our ancestors" is a phrase of ridicule, yet our despised progenitors effected many things worthy of imitation by a more boastful, if not a wiser race. When the plague decimated the City of London in the year 1665, the Corporation divided the City into quarters, and appointed certain "able and discreet Chirurgeons" to visit and personally ascertain the cause of death in every instance, for which service these officers were paid 1s. for each body visited. These Chirurgeons were not permitted to attend to any other professional business during the term of their engagement; and it would seem, considering the value of money at that time, and the great number of deaths that occurred within the City, that their remuneration was amply sufficient to compensate them for any loss they might sustain.

There can be no doubt that a Registrar or Inspector of the fact of death, or by whatever other name he may be called, is necessary to a perfect system of sanitary discipline; and if such officers should at a future time be appointed, we hope that the authorities will imitate the example of the ancient Corporation of London, and pay them liberally for their services.

The Central Board, too, should be invested with enlarged powers, or should form a branch of a National Board of Health, by which arrangement prompt action could be secured at the very advent of pestilential diseases in this country. The first case of cholera, for example, reported by the Registrar, would come immediately under the attention of the proper executive body, who could forthwith issue the requisite orders for the arrest of the plague. The functions of receiving the Reports and acting upon them are now divided between two distinct Boards; a piece of absurdity so clumsy and pernicious, that we shall be surprised if John Bull, in his great sagacity, is content much longer to be patiently fleeced for its maintenance.

We have already intimated our opinion of the propriety of the Poor-law Staff being placed under the jurisdiction of the Board of Health, so that the re-organization that we desire would bring all these public functionaries under one executive head, which, being composed of scientific Medical men, would constitute one of the most important offices of State, and would reflect great lustre and influence upon the Medical Profession.

CLASSICS AT THE COLLEGE OF SURGEONS.

HYGEIA and MINERVA have, at length, met in Lincoln's-Inn-Fields, and appear to have mutually determined to settle under the roof of the College of Surgeons. Henceforth Classics and Chirurgery are to be indissolubly united, and the Royal College has been elevated to the dignity of a sacred Fane. The adytum, however, is only accessible to a chosen few,—to whom will appertain the honours of the Fellowship; while the ordinary members, like the uncircumcised in the Hebrew temple, must keep aloof in the Gentile court.

The first institution of the Fellowship seems to be associated with classic reminiscences. Three hundred men at the Straits of Thermopylæ rescued the Spartan Republic from the Persian grasp,—and it is remarkable that the same number of Surgeons should be selected by the College to save that Institution from impending destruction. Our surgical Spartans, however, were not chosen because they possessed more "Greek fire" than their brethren, but from the mere caprice of the ruling Council; and, as might have been expected, the choice, instead of strengthening the College, has only made it more insecure.

The Charter, which, by a legislative blunder, allowed a certain number of men to be elevated above the heads of those who were their equals in a corporate capacity, provided that subsequent admissions to the Fellowship should be by examination. Up to the present time this has been of a purely surgical character; but henceforth Greek and Latin are to be dovetailed with surgery, so that the future Fellows may be models of classical learning and of surgical skill. A few weeks since the names of three gentlemen were announced as examiners in *literis humanioribus*, and since then the curriculum has appeared, which, if it do not damp the ardour of young aspirants, will at least annihilate the hopes of those practical men who were never known to decline a knife or a Greek noun. It is evident, by referring to the "ordinances relating to the Fellowship," that the College of Surgeons will consider its classical examination equal to that of B.A. in a British University; for those candidates for the Fellowship who have taken this degree will be "regarded as having competent knowledge of the Greek, Latin, and French Language," without further trial. The College deserves credit for the ingenuity with which it has framed its curriculum; as it requires the Candidates during the present year (with certain exceptions,) to translate portions of authors not become vulgar, by being too commonly used. From Herodotus is selected the Book consecrated to the Goddess who presides over star-gazing; and the young aspirant for surgical honours must show his knowledge of the naval tactics of the ancient Greeks! From Homer we have not the vulgar Iliad, found on every book-stall, with a translation; but the Odyssey, rare and dear. In Latin, we have Cicero, of course; but his Orations against Cataline, so familiar to every school-boy, and such splendid specimens of Roman eloquence, have properly been passed over; and we have instead the "Oratio pro Milone." The Candidate has here to familiarize himself with the nature of an Aristocratic Roman row, while he exhibits his knowledge of the Roman languages. Next we come to the Mantuan bard, and from the immortal Æneid is chosen the very book commencing with the immortal line—

"Arma virumque cano, Trojæ qui primus ab oris."

But, as if all these classic writers were not sufficient to test the candidate's knowledge of the Greek and Latin languages, he is required to translate some English author, not mentioned, into Latin. Why did not the Examiners show a little more mercy, and give the passage "to be done into Latin?" On the questions relat-

ing to Greek and Roman History, as they have not been published, we can offer no remarks. Why were they not published? The candidate must also give satisfactory proofs that he knows something about Arithmetic, Algebra, Euclid, Statics, Hydrostatics, Optics, and the French language.

Now, this classical curriculum is very showy, and may be very useful; but we have strong doubts whether it will not prove an insurmountable barrier to many clever young surgeons obtaining the Fellowship. We think, therefore, that the College has committed a serious error in requiring every candidate, even if he possess the Member's diploma of a later date than 1844, to be skilled in Classics, Mathematics, and French. It is fencing the Fellowship with a hedge in which there is no gap for a skilful Practitioner, with a defective general education, to obtain an entrance. The consequences are easily foreseen; the Fellows *may be* the best scholars, the Members *will be* the most accomplished Surgeons, and the College will neither enjoy the confidence of the Profession nor the respect of the Public.

The Physicians have already tried the experiment of making classical learning a passport to corporate honours; and so complete was the failure, that their College was only saved from ruin by a repeal of the bye-law which confined the Fellowship to Oxford and Cambridge Graduates. Why, then, should the Surgeons peril their Corporation, when they have a beacon to warn them of their danger? We are advocates of a liberal education for all the members of our Profession, but we would condemn any stringent regulations, which would exclude worthy men from collegiate rewards.

THE PARISIAN HOSPITALS.

HÔTEL DIEU.

Having in a former article given a general sketch of the Parisian hospitals, we shall notice each of these establishments in its turn. The Hôtel Dieu, as the oldest and most important, first attracts attention. The foundation of this venerable establishment appears to have taken place at so remote a period, that historians are unable to fix the epoch with any degree of certainty. The majority of writers incline to think that it was founded about the year 660, by Landry, Bishop of Paris; but no historical proof of the fact can be cited. All we know is, that the Hôtel-Dieu is perhaps the oldest hospital in Europe, and that it occupied its present site on the banks of the Seine, ever since the period of its foundation.

Before the time of St. Louis the Hospital consisted of three small buildings only, and was altogether insignificant. St. Louis took the establishment under his protection, increased it considerably, and may be regarded as its real founder. The Hospital was at first rather a house of refuge than a receptacle for the sick.

In the time of St. Louis it contained 900 patients, chiefly made up of pilgrims and beggars, with a few sick, admitted at all hours, and without any control. During the reign of Henry the Fourth, the hospital contained 1300 inhabitants; under Louis the XIIIth 1800; under Louis the XIVth 1900; finally, towards the beginning of the 18th century, in the year 1709, the population of the hospital reached the enormous amount of 9000.

It is almost impossible to imagine how such a crowd could receive accommodation within the walls of the hospital, the more particularly when we remember, that even so late as 1790, it contained, in addition to its ordinary population, a slaughter-house, an establishment for melting suet, and a candle manufactory. The persons connected with these different trades often occupied the beds destined for the sick, the greatest confusion pervaded the administration of the hospital, and its mortality was proportionate to its misrule.

When Tenon wrote his famous Report, in 1789, the Hôtel Dieu contained 1219 beds; of which 733 were *mis*-called *large* beds, being 4½ feet wide, and holding six patients at a time; 486 were very properly called *small* beds, for they were not quite 3 feet wide, yet held four patients together. The description which Tenon has left us of the state of the Hospital is worth recording, for it explains the excessive mortality of the house, which then amounted to 1 in 4, and enables us to show that the mortality has gradually diminished in proportion as the plain rules of hygiene have been attended to. Since 1789 thousands of lives have been saved by merely improving the sanitary condition of the Hôtel Dieu, the mortality in which has been reduced by one-half.

That it was formerly so high, can be readily understood. From four to six patients occupied the same bed. Nay, more; on pressing occasions, the beds were placed one over the other, —a mattrass being stretched on the roof of each bed; so that the wards became, as it were, double stories. The quantity of air for each patient was thus reduced from fifteen cubic metres to three or four. The dead and convalescent remained mingled with the sick, for there were neither dead-houses nor convalescent wards. Patients recovering from the severest maladies were compelled to walk out, without shoes or stockings, even in the depth of winter, on the bridge of St. Charles, to get a mouthful of fresh air. There was no operating theatre, and, accordingly, the most painful or prolonged operations were performed in the wards, where lay, indiscriminately, those who had been already mutilated, and the unfortunate patients awaiting their fate; the cries and groans of the sufferers awaking, in the former, a reminiscence of what they had undergone, and, in the latter, a dreadful apprehension of the torture in store for them. The insane ward was next to the operating ward, and the shouts of the ill-treated lunatics rendered sleep impossible. Finally, the lying-in women of the St. Joseph ward were placed three or four in a bed, thrown together without any distinction, and few, if any, survived.

Such was the condition of the Hôtel Dieu under Louis XVI. The great revolution came, and, as a necessary consequence, the state of the poor in the public hospitals attracted immediate attention.

The slaughter-house and candle manufactory were removed; the beds were divided by compartments; the insane were drafted off to other hospitals; the lying-in women, the children, and venereal patients, to establishments specially created for them. By these wise measures the number of beds was gradually reduced to 745; the neighbourhood, also, was greatly improved, by the removal of old houses, &c.; private rooms were given to the hospital servants, who formerly slept in the wards; the hospital was properly heated; and now, with the exception of its site, which is too close to the river, the Hôtel Dieu is not inferior, in point of hygiene, to any of the hospitals of Paris.

The Hôtel Dieu at present consists of three separate buildings, which are connected together by bridges. The principal building faces the square of Notre Dame, and presents nothing worthy of notice. It runs along the right bank of one of the branches of the Seine, which bifurcates just behind the Cathedral, and it is connected by a covered bridge with the second building, which runs parallel to it on the left bank of the river. The principal wards in the Hospital are the *salles* St. Marthe, St. Charles, St. Paul, and St. Joseph. The *salle* St. Marthe was founded during the reign of Francis I. by Chancellor Duprat. St. Charles was erected in 1602 by a donation from the President of the Parliament. In 1625 the Governors obtained permission to build the *salle* St. Joseph, and a bridge which passed from the Archbishop's Palace to the third division of the Hospital in the Rue de la Boucherie. The greater part of the other wards were added in 1714 when the tax on the theatres was increased by 1s. 9d. for this purpose.

The general aspect of the wards in the Hôtel Dieu is clean, but some of the *salles* appear dark, and rather low. The bedsteads are all of iron, furnished with clean white curtains, and nothing has been neglected to render the establishment worthy of the high reputation it has enjoyed since the days of Desault. A marble monument to the memory of this celebrated surgeon, and of Bichât, was erected in the vestibule of the Hospital in the year 1803. There is likewise here a fine statue of M. de Montyon, and some good portraits of Desault, Moreau, Pelletan, Bichât, Dupuytren, &c.

But, perhaps, one of the objects most worthy of notice in the Hôtel Dieu is the linen-room, where an immense depôt of linen is preserved under the care of the Sisters of Charity. Here the visiter will see some 5000 sheets, 2000 curtains, 14,000 shirts, 28,000 napkins or pillow cases, 7000 towels, and a variety of other linen, carefully arranged and perfectly aired, in wooden racks of enormous magnitude.

The annual expense of the Hôtel Dieu does not exceed 20,000*l.*; a small sum, when we consider the great number of patients relieved therein. Within the last thirty years the annual expense for each patient has been reduced by nearly one-half. With this great improvement, the mortality, as we remarked, has likewise been gradually reduced. In 1816 it was 1 in 4½; in 1826 it was 1 in 7; in 1836 1 in 9 1-3rd; at the present moment it is about 1 in 10. The staff of the Hôtel Dieu consists of 10 physicians, 3 surgeons, 32 internes, 124 externes, 60 Sisters of Charity, who act as nurses, and 140 servants of all kinds. Clinical Lectures on Medicine are delivered by MM. Chomel and Louis; those on Surgery by Roux

and Jobert. From the central situation of the hospital, the surgical service is extremely active, and it may be calculated that an operation is performed at least for every day throughout the year.

Except in cases where the student or medical practitioner desires to follow up some speciality, the Hôtel Dieu is in all respects the best hospital for the study of disease in Paris.

REVIEWS.

Atlas of Physical Geography. Constructed by AUGUSTUS PETERMANN, F.R.G.S.; with descriptive Letter-press, embracing a General View of the Physical Phenomena of the Globe. By the Rev. THOMAS MILNER, M.A., &c. Illustrated by 130 Vignettes in wood. London: William S. Orr and Co.

Of all branches of human knowledge, Physical Geography is probably the most captivating. The mind of youth clings instinctively to the picturesque contrasts of nature, and more sobered manhood is ennobled by the contemplation of the same phenomena in their wider aspect. The cave and the waterfall charm the observer, the mountain and the flood fill the mind with awe. The poet and the artist find inspiration in the ever-changing moods and ever-varying aspects of nature. The spiritually endowed enjoy the still higher gratification of tracing proofs of wisdom and goodness in the relations of an external world.

Looking at the beautiful Work before us, which speaks to the eye as much pictorially as it does by its letter-press, the characters of igneous rocks, —granitic veins,—and basaltic columns,—the more characteristic forms of organic remains, and the peculiarities of stratification, are at once familiarised to the mind, which is led, by the easiest possible transition, to the study of fissures and caves, glaciers, volcanoes, and other of the rarer geological phenomena. To these again succeed the consideration of water under its various aspects, springs, rivers, lakes, and oceans. Then, again, the atmosphere, with its winds and clouds, and storms and hurricanes, its hot and its cold regions, and its many peculiar optical and electrical phenomena.

But on the face of the earth, in the ocean beneath, and in the air above, there is organic life, and Physical Geography especially occupies itself with the distribution of forms,—a branch of study no less interesting than that of making acquaintance with the forms themselves. From the Banian tree, multiplying itself into a forest, to man congregating into nations; there is a scale in organic creation quite sufficiently delineated for ordinary purposes in the present Work.

These are themes of infinite interest, but they have also far higher bearings. In a philosophical point of view, the boast of the greatest physical geographer of the age—Humboldt—is to make an attempt in his "Cosmos" to trace the phenomena of physical objects in their general connexion, and to represent Nature as one great whole, moved and animated by internal forces. It is no more in the power of the uninitiated to comprehend all the special bearings of this great generalisation, without a considerable amount of study, than it is to solve a problem in fluxions without any elementary mathematical knowledge. To facilitate such a study, had we been writing a work on Physical Geography, we would have begun with the simplest meteorological phenomena, and traced the first drop of rain till it became a river, a delta, a rock, a mountain. All phenomena of matter are intimately connected; the naked lichen can be traced up to the most perfect plant, and the humblest medusa to the most gifted of creation.

"Descriptive Botany," says De Humboldt, "no longer confined to the narrow circle of the determination of genera and species, leads the observer, who traverses distant lands and lofty mountains, to the study of the geographical distribution of plants over the earth's surface, according to the distance from the equator and vertical elevation above the sea. It is further necessary to investigate the laws which regulate the differences of temperature and climate, and the meteorological processes of the atmosphere, before we can hope to explain the involved causes of vegetable distribution; and it is thus that the observer, who earnestly pursues the path of knowledge, is led from one class of phenomena to another, by means of the mutual dependence and connexion existing between them."

Nor is this all. The Rev. Mr. Milner justly remarks, that physical geography deals not only with subjects fraught with interest to the inquiring mind; but also with such as are important to the pursuits of commerce, and the social advance of mankind. The barometer is a familiar example of the benefit conferred by the science of meteorology. The laws of storms, as developed by Colonel Reid, and atmospheric electricity, as grappled with by a Harris, are also examples of what has been done, even in recent times, towards improving the safety of commercial navigation, and, as a consequence, the social advance of nations; but the fact is, that man, with all his dignity and greatness, is so intimately dependent on and connected with external nature, that it is impossible to give impulse to the study of the latter without signally improving his condition, and benefiting mankind generally.

There is one point of view in which physical geography still remains to be contemplated, and one which is more peculiarly fitted for our pages; that is, in reference to the influence of climate on man and its endemic influences. Ethnography, or the physical differences of mankind, undoubtedly more or less dependent on climate, exposure, and other circumstances, as well as with a more mysterious dispensation, is a study without which the education of a medical man would be truly incomplete. The Rev. Mr. Milner takes up, we are happy to see, a rational view of this interesting branch of inquiry. "Various considerations," he says, "decisively show that the distinctions of colour exhibited by the human race are perfectly independent of diversity of origin as the cause." "Anatomical investigation proves the true skin to be similar in all nations." And further on he remarks, "the argument against the unity of mankind, founded upon differences of colour, is completely exploded by the consideration that varieties of hue, quite as strongly marked, occur in animals of the same species."

If this is the case in regard to the more manifest differences, how much more so is it the case in regard to those differences of strength, stature, proportion, form of skull, and character of hair, to which so much importance has been attached, as indicating variety of species, but which are, in fact, to a certain extent, met with among one particular race, as well as among races, as contrasted one with another.

It is important also to the medical man, easily carried away by the theorists who advocate a variety in the human species, that he should familiarize himself with this fact, that while the physical differences of mankind are not only consistent with the anatomical phenomena exhibited by known species, their unity is strongly confirmed by a common conformity to the same physiological laws. There is, as Mr. Milner justly points out, a wide distinction between man and animals that make the nearest approach to him, in point of longevity, the extreme term of the orang-outang's being estimated at not more than thirty years; but the capacity for long life is not greater in one tribe of the human race than another,—nor is there any difference as to its average duration, under equal circumstances as to climate, food, clothing, habitation, and the sanitary aids which civilization furnishes.

The same general coincidence prevails with reference to other physiological characters, as the age of puberty, the period of gestation, the signs of advancing life, and the diseases to which the human frame is subject, the greater part of which are common to all communities, modified by differing climates and local position.

It is the study of these latter differences which is of imperious necessity to the medical man. The medical topography of the locality of his own immediate labours ought to be the subject of every practitioner's most careful investigations.

It is only within recent years that the numerical method of investigating diseases has been strictly adopted. Its application to the investigation of morbid actions has already proved so successful, that the doctrine of averages has been not unaptly termed the mathematics of medical science. Medical statistics may be defined to be the application of numbers to the elucidation of the natural history of man in health and disease. As the experience of the civil practitioner is on too limited a scale, and his observations too unmethodical to warrant general conclusions, it is only by extending such observations through a series of years, and over vast masses of individuals, that correct conclusions can be attained, as well as important relations disclosed, discoverable in no other way. As a test of the truth of theories, statistical investigations are of vast importance. Could all medical opinions be submitted to the searching ordeal of numbers, the substance of many a ponderous volume might be condensed upon its title-page.

It is more particularly in the diseases of pulmonary organs, that observations of this kind are still wanted. It was only the other day that we read a little book recommending the Arctic regions for the cure of phthisis pulmonalis. This appeared very extravagant, but it is generally admitted, especially by American etiologists ("The Climate of the United States, and its Endemic Influences," by S. Forry, M.D.) that phthisis prevails less in hot and very cold, than in temperate countries. The influence of moisture in the production of catarrh, pleuritis, pneumonia, and phthisis, has also been too exclusively considered. So, also, in regard to rheumatic diseases, the exciting causes, viz., exposure to a cold, moist, and variable atmosphere, must be considered in their subordination to the predisposition induced by the extremes of summer and winter. The difficulties inherent in the study of diseases of malarial origin are still more formidable.

A correct knowledge of endemic diseases is still a desideratum in our professional literature. The subject is intimately interwoven with those sanitary considerations which have of late excited so much attention, and which are of so much importance to the welfare of our species. Nor can the study of such subjects be commenced with greater prospects of success, than by such a work as that now before us. The elements of a branch of knowledge which is now entitled to take its rank with other departments of Natural Philosophy, are indeed so admirably conveyed in Mr. Petermann's maps, that we cannot use too strong terms in recommending them to the Profession.

Contributions to the Physiology of the Alimentary Canal. By WILLIAM BRINTON, M.D. London: Liceptiate of the Royal College of Physicians, Demonstrator of Anatomy in King's College, London.

Dr. Brinton's articles in the Cyclopædia of Anatomy and Physiology have earned for him a high place in Medical Science. The paper before us must still further increase his reputation. It was originally published in a contemporary Journal; but we gladly, because of its intrinsic merit, avail ourselves of its appearance in a separate form, to bring it under the notice of our readers. The opinions enforced in it are as sound as they are novel.

In the first part, which treats of the movements of the stomach, Dr. Brinton shows, that the so-called oblique layer of muscular fibre of that organ is really a transverse layer—transverse, that is to say, "not to the apparent horizontal axis, but to to that real axis of the tube which occupies its centre, and is terminated by its orifices."

By the aid of experiments on dogs and cats, Dr. Brinton appears to have very clearly made out that—

"Soon after ingestion the peristaltic movements engage the whole of the organ; but, even at that time, there is a manifest preponderance in the pyloric half; the pylorus is at this time firmly shut. Towards the termination of digestion, the cardiac extremity experiences less movement, but the peristalsis of the pyloric portion becomes much more rapid and vehement."

The well known experiments of Beaumont have led physiologists to regard as an established fact, the idea that the food, during stomach digestion, after passing the cardia, is carried along the greater curvature of the organ from left to right, and then along the smaller arch from right to left. The explanation, Dr. Brinton says, usually given of the phenomena observed, involves an apparent inconsistency, because there is only one movement of the stomach,—a peristaltic movement uniformly forwards,—while the ingesta have, it is alleged, two opposite movements, viz., "one forwards to the pylorus, and one backwards to the cardia."

This apparent inconsistency may, Dr. Brinton conceives, be thus explained:—

"The most simple and obvious course, and one which, to some extent, will reflect light upon the data, as well as on the result, is to imitate the natural conditions and to observe and compare the effects.

"Thus taking a long membranous tube, preferably of considerable size and width,—such as the prepared weasands sold to the sausage-makers,—and filling it with water, to moderate but not extreme distension, by tying up both extremities we tolerably approach to the condition of the simple stomach of some animals.

"The opposed and semi-flexed forefinger and thumb will produce a transverse circular indentation, which, carried slowly forwards, will similarly come near to a peristaltic movement. By previously introducing any sufficiently visible and flexible object, of considerable length, little diameter, and a specific gravity somewhere about that of water, and by attaching this to the centre of one extremity, we shall obtain an index of the current developed in this part of the interior. Ordinary black tape fulfils these requirements.

"And now, producing the transverse constriction in the manner just mentioned, and moving it rapidly and frequently from the one end to the other, an elongation of the black string attached to the centre of that extremity to which the movement is constantly carried, indicates that a backward current of liquid in the axis of the tube is a coincident of the forward one which occupies its periphery; and, like it, is the direct result of the peristalsis.

"Transverse contractions, of uniform direction, occurring in a *closed* tube filled with a liquid, and falling short of obliterating its calibre, necessarily imply two currents—a superficial or *peripheric*, in the direction of those contractions, and an *axial* or *centric*, having precisely the reverse course. We thus have at once a complete elucidation of the revolutions of the food, which Dr. Beaumont witnessed The return of the alimentary bolus, was, to all appearance, along the lesser curvature; and when we recollect the situation of the opening into the viscus, from which his observations were made, it is evident that a movement along the real axis of the organ would be so near to the curved border, and comparatively so far from the point of view, that he could scarcely have avoided imputing to it the course which he has done."

It is by this backward axial current, and not by the commonly received idea of an anteperistaltic movement of the stomach, that Dr. Brinton explains the share which that organ takes in the production of vomiting; the regurgitation of fluid during the digestive process; and the easy kind of vomiting occasionally witnessed in very young children while feeding.

The second part of the paper is entitled, "On the Physiology of Intestinal Obstruction."

Fœcal vomiting, one of the most remarkable symptoms of occlusion of the intestine, has been, up to the present time, explained by a supposed anteperistaltic action of the bowel above the occluded point. Having exposed the very slight evidence on which the anteperistaltic theory rests, the Author offers the following very powerful arguments, which show it to be in the highest degree improbable.

1. Irritation, the supposed cause of anteperistalsis occurs in every morbid affection of the bowels, and yet occlusion is the *only* condition in which fœcal vomiting occurs.

2. After death, the most distended part of the bowel is that immediately above the point of obstruction, if the fœcal vomiting arose from anteperistalsis, then a sufficient quantity of the contents ought before death to have been carried upwards to render the distension at least equal throughout.

3. Certain phenomena, observed in cases of invagination.

4. The supposed anteperistalsis is a continuous movement; the vomiting only an interrupted phenomenon. To this objection, however, Dr. Brinton attributes little weight.

5. While an anteperistaltic action is alleged to take place above the point of obstruction, a peristaltic action it is obvious, must have gone on in the part below the strangulation; that this ordinary action of the intestine continues in many cases, is proved by the expulsion of the solid contents of the bowels. From one and the same point, then, two opposite movements must then have set forth; the one upwards toward the stomach, the other downwards towards the rectum.

6. The time at which the symptom first appears, ought simply to vary with the distance of the stricture from the stomach; *i. e.*, if the anteperistaltic theory be true; but extended observation shows, that it depends on two things—length of cavity and quantity of contents. And further, that distension is not only essential to the occurrence, but is that which chiefly regulates its access. Now, distension is no more a condition necessary to anteperistalsis than to peristalsis, while it is essential to the theory which the Author seeks to establish.

That theory is as follows:—

When any part of the intestinal canal has its cavity obliterated by a mechanical obstacle, the ordinary peristaltic action of the intestine above, by propelling onward its contents, gradually distends the whole intestine between the stricture and the pylorus. Continued peristalsis tends to develope in the fluid contents of the dilated portion an axial reversed current, and, in this way, the intestinal fluid passes into the stomach, and is subsequently ejected by vomiting.

We have thus endeavoured to give our readers a general outline of the Author's objections to certain currently received doctrines, and his chief arguments in favour of the theory he advocates; but Dr. Brinton's paper itself is so free from superfluous verbiage, and every sentence bears so directly on the point he wishes to establish, that to give the full scope of his arguments it would be necessary to transcribe the whole paper. We can assure our readers that, whether the physiological novelty of the views propounded be considered, the style of reasoning, or the ingenuity of the experiments, this paper well deserves serious attention.

The Medical Directory for 1850.

We have received "The London and Provincial Medical Directory." It is the fifth that has been offered to the Profession, the members of which cannot fail to acknowledge it to be well worthy of the patronage it has received. We think it is indispensable to the Medical man, and it ought to be on the library-table of every one, whether he be a Physician, Surgeon, or Apothecary. The Directory for 1850 contains the name, place, and residence of every Practitioner in England; if he has a private residence apart from his place of business, both addresses are given; the qualifications of all are inserted in the order of their importance; the degree of M.D. is in no case appended to a name, unless the University whence it was derived is given; the holders of foreign diplomas are not omitted; and the public appointments and offices held by all Medical men in England are enumerated;—in a word, it contains the name, address, qualification, appointments, and published works of every known qualified physician, surgeon, and general practitioner in England. The weekly, bi-monthly, monthly, quarterly, half-yearly, and annual medical periodicals, with their publishers' names, are enumerated. The public medical Institutions, and Poor-law medical staff are, as it were, gazetted. The regulations of the London Colleges of Physicians and of Surgeons, and of the Society of Apothecaries are detailed, as also those of the Universities and Colleges of the three kingdoms. To review such a work were impossible; and no praise we can bestow upon it would compensate for the toil and labour which have been given to it. We repeat, every Medical man should possess it. Mr. Churchill, its publisher, deserves well of the Medical Profession; but he has bestowed no more acceptable and useful boon upon it than "The London and Provincial Medical Directory for 1850."

We have, however, one fault to find:—an asterisk is prefixed to the names of persons who, as the Editors say, have not made any return of the nature of their qualifications, and whose names cannot be found in the authenticated *London* lists of licensed Practitioners. We think the Editors would have done better to have omitted altogether the names of the persons in question, and that more especially since some of their number—and, in comparison, they are but few—might have been in practice before 1815, or actually are members of the *Scotch* or *Irish* Colleges. While others, again, although medical men, may not profess to practise. We hope, however, with the Editors, that "every gentleman will supply his qualification for correct entry in next year's (1851) Directory;" and we also trust, that Mr. Churchill will devise means to include Scotland and Ireland in this most useful medical Annual.

MR. BURDER, of Liverpool, has presented 50*l.* to the Eye and Ear Infirmary of that town.

WE understand that Dr. Costello has withdrawn from the management of Wyke-house Private Lunatic Asylum, and has been succeeded by Dr. Bascumbe, under whose care and superintendence we may augur favourably of the future success and prosperity of this establishment.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, January 22, 1850.

G. MACILWAIN, Esq., V.P., in the Chair.

CHEMICAL RESEARCHES ON THE NATURE AND CAUSE OF CHOLERA.

By ROBERT DUNDAS THOMSON, M.D., Glasgow.
[Communicated by Sir B. C. BRODIE, Bart.]

In the first part of the paper the author details the results of chemical analyses of the blood, urine, and intestinal discharges, in the cold, or "lymphatic" stage of cholera; and in the "biliary," or febrile stage. The main results arrived at are—1. That in the cold stage of the disease the specific gravity of the blood, and of the serum separated from the clot, is increased; that the proportion of water is less than in health by at least 9 per cent., and in some cases by as much as 17 per cent.; that both the organic and the inorganic components of the blood are proportionally increased in amount; but that the increase of the insoluble salts is much greater than that of the soluble salts. 2. That the intestinal discharges, in the cold stage, when of the true "rice-water" character, resemble closely, in their chemical composition, the fluids of hydrocele and hydrocephalus; that their flocculi are formed of epithelial scales, and the watery part of water, containing a small proportion of organic matter (albumen) and salts (chloride of sodium, carbonate of soda, earthy phosphate, alkaline sulphate, and some lime). 3. That the small quantity of urine sometimes found in the bladder, in this stage, presented no apparent aberration from an ordinary standard. 4. That in the biliary, or febrile stage of cholera, the blood soon regains its normal proportion of water, or even an excess of it; and that the other constituents resume their natural relation to each other. 5. That the urine, in the biliary stage, in several cases contained albumen, but presented scarcely any other deviation from the urine of health, except in the amount of urea, which at first was deficient. In the second part of the paper the author describes some experiments, instituted by him, with the view of determining whether any poison could be detected in the atmosphere. In one series of experiments it was ascertained that no solid matter existed in the air; but ammonia was obtained from it in the proportion of 0·319 grains of caustic ammonia, or 0·731 grains of carbonate of ammonia to 1000 pounds of air. By another series of experiments it was determined that no carbon or hydrogen existed in the atmosphere, except in the states of carbonic acid and water; while carbonic acid was obtained in the proportion of one volume to 6650 volumes of air. In his concluding remarks, the author argues that the cause of cholera is not a specific, tangible poison, introduced into the body from without, but rather a vicarious transference of the cutaneous excretion to the intestinal mucous membrane, dependent partly on atmospheric influence, and partly on a predisposing state of the system, in those who are affected with the disease.

Dr. Snow observed that the experiments on the blood and evacuations described by Dr. Thomson, confirmed those which had been previously instituted by Drs. Garrod and Parkes; while those on the atmospheric air showed that there did not exist any particular poison in the atmosphere during the prevalence of cholera. Dr. Thomson had ably pointed out the fanciful reasons which had led others to attribute the outbreak of the epidemic to atmospheric poison, but it appears that he himself attributes cholera to some abnormal condition of the atmosphere, by which the excretion of fluids from the lungs and skin is impeded. The state of the atmosphere which is productive of such an effect is well known, and, although it may have existed in Glasgow while cholera was present in that city, it certainly was not the case in London in August and the early part of September in last year. In fact, cholera has prevailed in different places under every condition of the atmosphere. The chemical analyses of choleraic blood prove that it has been so thoroughly deprived of its serum, as to be unable to circulate through the capillaries, and to this he (Dr. Snow) attributed the occurrence of collapse, and of the other symptoms characteristic of the disease. Dr. Thomson had drawn a parallel between cholera and influenza; he (Dr. Snow) believed both diseases spread by contagion, the morbid matter being taken up by the mucous membrane engaged in the disease. Influenza was formerly regarded as contagious, but the opinion of the profession in this respect has since changed, and as its epidemics in some respect resemble those of cholera, it has caused, in some degree, the belief, that cholera is not contagious. It is difficult to prove the spread of the disease by contagion in all cases, but in some it is very clear. In cholera the poison has to be applied to the mucous membrane of the alimentary canal, and to effect that it must first be swallowed, and, consequently, its progress must be slower than that of influenza, which is propagated by the breath. Where the habits of persons are very dirty, or water contaminated by sewage fluids is used, the disease spreads more rapidly. The Report of the Registrar-General shows, that those districts of London which are supplied with water from the Thames,—water notoriously contaminated with sewage matters, the cases of cholera were of more frequent occurrence, and greater severity and fatality. During the prevalence of cholera, it is manifest that the Thames water must contain a greater or less proportion of choleraic evacuations. In the neighbourhood of Bridge-street, Blackfriars, the epidemic was very fatal; its severity was attributed to the use of the water of St. Bride's pump, the well being contaminated by leakage from the Fleet Ditch. This pump had since been closed. All the facts connected with the disease being taken into consideration, Dr. Snow thought there was reason to conclude that the disease was propagated by something which was swallowed, and thus applied to the mucous membrane of alimentary canal, on which it acted as a poison.

Dr. Copland remarked, that, as the analyses made by Dr. Thomson, had been at the suggestion of the Board of Health, he was surprised that they were not more numerous. They were instituted in three cases only. [Dr. Baly here observed, that in some experiments there were seven cases examined.] The condition of the blood, excretions, &c., of persons in good health varies very much, according to the state of health previously enjoyed. On this point the paper did not afford any information. In the analyses of the fæces, there is not any notice of the medicines which had been given previously, which must have caused some modification. There is not either any analysis of the fluid frequently found coating the intestinal canal. He thought that the paper, as far as it went, confirmed previous observation, but was not so satisfactory as it ought to have been, from the paucity of the analyses. The analyses of the atmosphere had all been carried on in the College of Glasgow, and the results were negative. They ought to have been performed in the wards of a cholera hospital or in the sick chamber, and the breath and emanations of the body should have been examined. In all these points, the paper, as a guide to discover the causes of the disease, was a complete failure. The information it afforded was quite negative. As to the means of curing the disease, he should not apply to the emissaries of the Board of Health, who are employed to support preconceived opinions, and not to elicit truth. He (Dr. Copland) believed there was now evidence to show that their opinions were greatly modified, and the question of contagion generally admitted. Many mis-statements had been made on this point. The disease was reported to have broken out in a workhouse, where it could not have been introduced. but this proved not to be the fact. Several cases of the disease, reported as such by the surgeon, had been admitted into the workhouse, and had there proved fatal. Others followed afterwards. All this had been suppressed.

Dr. Baly read an extract from the paper, showing that the experiments on the atmosphere were in two sets, one occupying eight, and the other eleven days. He then added, that the author considers suppression of the perspiration to be the probable cause of cholera, the fluid being transferred by the intestinal canal, but he (Dr. Baly) did not believe that so excessive a discharge could be thus produced. Besides, in many of the worst cases, the perspiration is not suppressed. Dr. Snow had said, that the coldness was caused by the non-circulation of the blood, but the blood does circulate, although not so rapidly as in health. The loss of the serum of the blood was, he thought, the cause of the symptoms, by preventing the chemical changes which ought to take place in the body, by which animal heat is generated. If the blood retained its usual quantity of serum, and yet respiration were imperfect, and the renal fluid unsecreted, the circulating fluid would be loaded with carbonic acid and urea, and the brain would be affected, but this is not the case in cholera, because during the cold stage of the disease, the chemical changes are not carried on in the body, in consequence of the absence of the serum of the blood, so that there is not the usual amount of urea and carbonic acid generated. Under these circumstances the functions of the brain remain nearly intact to the last moment. Dr. Baly then referred to certain experiments instituted by Mr. Barlow respecting the occurrence of muscular action, and the generation of animal heat long after death in some cases.

Mr. W. F. Barlow was not of opinion, that the failure to demonstrate the existence of poison in the atmosphere was a proof that such was not the cause of cholera. Its existence could not be demonstrably proved in diseases which were clearly so caused, as small-pox and scarlatina. The extreme irritability of the muscular fibres in cholera during life, and after death, constituted a remarkable fact in the history of the disease. A true explanation of the cause of the changes could not, perhaps, be given; but he (Mr. Barlow) referred it to the condition of the blood in the cold stage of cholera, during which carbonic acid, and, consequently, animal heat, were not generated. The elevation of temperature after death is very difficult to explain. It does not depend on the *post-mortem* muscular contractions, because extreme elevation of temperature has occurred when the contractions have not been met with. There was a case of this at the British Infirmary, and something of the same kind is seen in yellow fever, as is also the muscular irritability. There was an actual formation of heat after death; in cases where the body was actually cold at the time of decease, the temperature has risen to 109°. He (Mr. Barlow) thought it must be referred to chemical changes going on in the blood after death, such as occur during life. He threw this out merely as a suggestion.

Dr. Webster, with reference to the effects of the atmosphere as the cause of cholera, mentioned, that that disease having broken out among the 2nd Life Guards at Knightsbridge, the regiment was sent to Canterbury, after which no more cases occurred. Several of the women slept the next night in the barracks that had been vacated, and two were seized with cholera. This, he thought, was an illustration of the effects of the locality.

Dr. Basham referred to Dr. Thomson's analyses of the blood, and to his statement, that that fluid in cholera contained more saline ingredients than in health. Dr. Thomson had taken Lecanu's standard as his guide; but this was univerally held to be too low. Becquerel's analysis was more correct. He (Dr. Basham) was surprised Dr. Thomson should have made Lecanu his authority, and thereby caused an impression with respect to his analyses at variance with the experiments of Garrod and others. Fibine, also, was considered by the author as being in excess; but he did not ascertain whether the increase was real or relative. He (Dr. Basham) had met with urea in the blood in two cases during the late epidemic. One patient died during collapse, and the other in the stage of re-action. This occurrence the author did not allude to. When there was only a small quantity of urine in the bladder; its analysis was very different from that of healthy urine. It did not contain any urea or phosphatic salt, and traces only of the chlorides.

Dr. Baly, in reply to Dr. Basham, remarked, that Dr. Thomson had quoted Enderlin and Marchand's analyses of the blood, as well as referred to Lecanu.

Dr. Copland was inclined to attribute the elevation of temperature, which is occasionally found twenty-four or thirty-six hours after death, to commencing decomposition. The same thing is met with in all malignant diseases, in yellow fever, and in malignant puerperal fever.

Dr. Stewart mentioned that Dr. Garrod had found the blood acid in two cases.

Meeting then adjourned.

WESTMINSTER MEDICAL SOCIETY.

F. HIRD, Esq., President, in the Chair.

NEW PREPARATION OF POTASSA CUM CALCE.

Dr. Henry Bennett brought before the Society a new preparation of caustic potash, which he had prepared, by combination with lime, in order to avoid the inconvenience attending its fusibility and tendency to diliquescence. It is made by melting two parts of potassa fusa and one of lime, which, when duly mixed together, can be run into moulds, and used as safely as the nitrate of silver. He has used it in three sizes: one about the size of a crow-quill; another as large as the cylinders of lunar caustic, and the third much larger, for cauterizing deeply. This constitutes a caustic as manageable as the nitrate of silver, and its action may be equally limited, if the part be previously wiped dry. He (Dr. Bennett) had used it chiefly in uterine disease; but he believed it would be found equally applicable as a caustic for chancres, the fauces, and all other parts of the body. Although this preparation is not deliquescent, like potassa fusa, still it will attract moisture if exposed to the air, and should not be left uncovered. It will become pulverescent, and useless. Dr. Bennett's experiments were carried on in conjunction with Mr. Squire, from whom this preparation may be obtained.

CARIES OF THE HEAD OF THE FEMUR.

Mr. H. Smith exhibited two specimens of caries of the head of the femur, both of which had been excised. The first had been removed by Mr. Morris, of Spalding, from a youth, eighteen years of age. The case has been so accurately detailed in the *Medical Times*, that there was no occasion to allude to it further, especially as he did not intend to describe the operation, which he considered was now established in surgery. This instance was eminently successful. The other specimen was obtained from an adult, between thirty and forty years of age, formerly in the Grenadier Guards. He (Mr. Smith) had removed the diseased bone two years ago; the patient survived the operation six months. This last-named specimen, which had been macerated in warm water for three months, exhibited the early stage of caries; the disease had only existed eighteen months; the globular shape of the head was unchanged, but it was carious (honey-combed) all over. The neck of the bone was altogether unaffected; it remained of the usual length, and at the ordinary oblique angle with the head. In the other, the disease had been in existence six years, and the head of the bone was completely flattened out, the neck being almost destroyed. Instead of an oblique arch it presented a right angle, with the head. In his own case, all the symptoms of dislocation of the head of the femur existed, and the operation proved his diagnosis to be correct. In Mr. Morris' case, it was supposed that dislocation had taken place, that this was proved not to be the case when the operation was performed. A difficulty was experienced in dislocating the head, owing to a small piece of bone which had separated from it, and lay in one of the sinuses. It was this which caused the symptoms simulating dislocation. There was very great shortening of the limb, in consequence of the destruction of the neck of the bones. He believed, that after the removal of the diseased bone, inflammation set in, lymph was thrown out in the acetabulum (if healthy) the head of the femur became rounded off, and fibrous tissue was formed, from which resulted an entirely new capsule. In fact there is a supplemental joint. To show how quickly the reparative process of nature goes on, he mentioned that Mr. Morris' patient was able to flex the thigh that had been operated on, on the pelvis, as readily as the other, seven weeks after the head of the femur had been excised. He had seen, last Thursday, a patient who had been operated on by Mr. Fergusson a year ago, and she was able to walk with the aid of a high-heeled shoe, without a crutch.

MALIGNANT DISEASE OF THE OVARIES AND RECTUM.

Mr. Nunn brought before the Society two ovaries affected with malignant degeneration. The right was generally hard, the left full of cysts. Malignant deposit was found on the peritoneum, in the breasts, and some other glands. The diseased ovaries were supplied with blood by the spermatic artery, branches from the colic and internal iliac. Malignant ulceration was also discovered in the rectum. The bladder was not examined. The patient, who had been in St. Giles' Infirmary, sunk exhausted from hæmorrhage from the rectum.

BONE IN THE LONGITUDINAL SINUS.

Dr. Woodfall mentioned the case of a female, sixty years of age, who had fallen down in her room, and was unable to rise, although quite sensible. A few hours afterwards she became comatose, and when he saw her she was completely insensible, with stertorous breathing, flapping of the lips and cheeks, &c. The pulse was at first feeble and irregular, but afterwards full and strong. She was said to have been subject to fits, supposed to be epileptic. The attack proved fatal in nineteen hours. On examining the head, two pieces of bone were found in the longitudinal sinus, one loose and the other attached but slightly. Two other pieces were found on the membranes. The substance of the brain was generally soft, and the cornu in the left ventricle especially so.

MALIGNANT DISEASE OF THE BLADDER.

Dr. Lankester read the particulars of a case of malignant disease of the bladder, recalled to his mind by some cases of hæmorrhage from the bladder, brought before the Society by Mr. Nunn:—

In the spring of 1843 Dr. Lankester was consulted by a gentleman sixty-two years of age, a small man, of active habits, and temperate all his life. He had nevertheless suffered much from dyspepsia, and had latterly been compelled to attend to his diet with more than usual care. He had frequently had recourse to medical advice for his dyspeptic attacks. About twelve months before I saw him, working in his garden, he was attacked suddenly with a pain in his back, followed by a desire to make water, on passing which he found it coloured with blood. He immediately sought medical advice, but the pain in the back continued, with a fresh appearance of blood in the urine. He wasted, lost his appetite, became sleepless, and the desire to pass his water frequently, increased, and the pain in the back continued, with great pain in the inside of the thighs. Under these circumstances it occurred to his medical attendants that stone in the bladder was the cause of his symptoms, and he was sounded more than once, but no stone could be found. When seen by Dr. Lankester he was very thin, with an anxious countenance, and a peculiar stoop in his gait. He suffered much from dyspeptic symptoms, taking food being frequently followed by severe gastrodynia. The bowels were habitually constipated, and never relieved without medicine. He was restless at night, and obliged to get up very frequently to relieve the bladder. He suffered great pain in the back; but referred the seat of it to the region of the bladder in front, above the pubes. Pressure in this region evidently gave him pain. The urine, which he passed every hour or hour and a half, was sometimes more coloured than at others. It gave an acid re-action to test paper, and, after standing a considerable time, threw down a deposit which, under the microscope, presented lithate of ammonia and organic shreds, apparently of mucous and fibrine. Blood and pus globules could also be plainly distinguished. On applying heat and nitric acid, albumen was precipitated. With these symptoms it was somewhat difficult to come to a conclusion with regard to the disease. There was no doubt sufficient ground to suspect stone in the bladder, but no stone could be discovered. Although there was albumen in the urine, there were no general symptoms of disease of the kidneys and other symptoms, such as the blood in the urine were sufficient to indicate that the albumen might occur, as the result of other causes than renal derangement. There was no disease of the prostate gland. Under these circumstances, I was inclined to regard the case as one of chronic inflammation of the bladder, with ulceration. With the view of alleviating the pain, opium and henbane were given, and mustard cataplasms applied over the region of the pubes. He seemed to get a little better under this treatment, and I subsequently gave him copaiba. In the summer he went into the country, and I lost sight of him for a few months. I was again sent for to see him on the 21st of December. In the mean time I found he had consulted an eminent surgeon, who had passed a catheter, and endeavoured to inject the bladder. This operation had been attended with great pain, and an increased amount of blood in the urine. In a note I subsequently received from a surgeon, who was then consulted, he says, "I could not, when I once tried to inject the bladder with warm water, get the fluid to pass, although the catheter was fairly beyond all possibility of prostatic obstruction." My patient was now in a much worse condition than when I last saw him. He was exceedingly emaciated; the pain in the back and region of the bladder was constant and intense. He passed his urine more frequently than ever. It was occasionally bloody, but sometimes clear. On standing for a short time it deposited a thick sediment, which consisted of lithates, mixed with amorphous organic matter. Nitric acid and heat showed a large quantity of albumen. His bowels were very much relaxed, and he was troubled with vomiting. The purging was arrested in the course of a few days, but the sickness continued. He took ½ gr. doses of morphia thrice a day, which in some measure subdued the pain, but he gradually got weaker, and sank on the 2nd of January following.

Post-mortem examination—The lungs and liver were healthy. The heart of natural size; slight deposits upon the mitral and semilunar valves. Both kidneys were enlarged, the left much more than the right. The capsule was easily separable from the mass of the kidney. The tissue of the whole kidney was soft and easily broken down, but there was no conversion of tissue. The pelvis contained some puriform fluid, which was traceable down the ureter. The right kidney was the smaller; its pelvis was highly injected matter; parts of the kidney presented granular degeneration. The coats of the bladder were firm when grasped from the outside. It was empty, and on opening it through the urethra a loose organized mass of a yellowish colour was found free. Attached to a point near the neck of the bladder, was a granulated mass, highly injected, presenting portions of a red colour passing off into white. It was easily broken down with the knife, and yielded to slight pressure. Higher up the bladder, on one side the fundus, another tumour presented itself, of larger size, and having the same character as that below. The mass that was loose had evidently been separated from one of the portions still in connexion with the bladder. I had not the opportunity of examining these growths by the microscope, but no doubt can exist of their belonging to that variety of carcinomatous growths which have been designated medullary sarcoma, fungus hæmatodes, &c. The coats of the bladder were very much thickened. The prostate was considerably enlarged, and, on cutting into it, several points presented themselves, in which matter precisely similar to that of which the growths in the bladder were composed, was found. The glands of the abdomen, spleen, pancreas, stomach, &c., were examined, but presented no trace of malignant disease.

Dr. Lankester remarked, he had brought this case before the Society, rather as an example of a serious and interesting disease, than on account of its intrinsic merits. When its history is taken into consideration, it is evident that diagnosis of malignant disease of the bladder is somewhat difficult. The symptoms present in this case, and which seem to be very constant in the cases which have been reported, are pain in the back, pain at the neck of the bladder, referred to the region of the pubes, blood in the urine, and a frequent desire to void it. Other cases present additional symptoms, such as difficulty in passing the water, on account of the tumour obstructing the passage into the urethra, &c. The pain in the back may arise from disease of the kidney, or irritation from disease in the bladder; the pain in the bladder itself may be produced by stone or inflammation. The bloody urine may be the result of hæmorrhage from the kidneys, from congestion of the bladder, stone, or ulceration. The frequent desire to pass the water is also a symptom of many other forms of the disease; so that neither one nor the whole of these symptoms will serve as an unerring guide. There are, however, some points with regard to the blood and other products in the urine, which may serve to assist our diagnosis. When blood flows after the introduction of the sound, or passes in small quantity from the urethra after the flow of urine has terminated, we may conclude that the hæmorrhage is not from the kidneys, but from the bladder. Sir Benjamin Brodie, states, that it is not uncommon for small portions of the fungoid growth to be passed with the urine, which will discover the disease. This, however, does not always occur, and it was not observed in the case I have related. It thus appears, that thus far we are without any absolute diagnostic of the presence of this disease. There is still, however, one mode of inquiry, the microscope. At the time this case occurred to me, we were not so well acquainted with the microscopical appearances of carcinoma as we are at present; and it appears to me the use of this instrument affords the most avail-

able means for diagnosis in this disease. The fact, that the form of carcinoma in the bladder is generally of the softer kind, and that this organ is seldom affected by analogous formations, which, occurring on the external parts of the body, present appearances similar to those of carcinoma, renders the diagnosis of malignant disease of the bladder, by this means, much more decided. In the absence of the peculiar cells, which, although not specially characteristic of, are yet constantly found in carcinomatous growths, I have been able to draw the inference of the disease not being malignant, where bloody urine has been passed, from the absence of these bodies. Professor Jenner informs me, that Dr. John Taylor was able to diagnose the presence of malignant disease of the bladder, by the presence of the peculiar nucleated and fusiform cells. Mr. Lane also states, that in two cases he has been able to recognize very distinctly the presence of carcinomatous cells in fungoid disease of the bladder. With regard to the treatment of this disease, njections of warm water have been recommended; but they gave no relief in this case. Opium, as in so many other forms of malignant disease, seems to be the medicine which offers the greatest resource as a means of alleviating the sufferings of the patient. Astringents, such as gallic acid and acetate of lead, which act favourably in hæmorrhage generally, would probably be of service where the hæmorrhage was an alarming symptom in fungoid disease of the bladder.

Mr. Coulson agreed with Dr. Lankester as to the difficulty of distinguishing morbid growths in the bladder. There was first the simple polypus, which might be of small size, or might occupy the entire cavity of that viscus. There is, also, fungus hematodes, a very rare disease, and generally complicated with calculus. A man who had been well known about town, suffered from this disease, and had numerous calculi besides. He sunk at last from exhaustion, and there was the disease which was met with in Dr. Lankester's case, which he believed was medullary sarcoma. Mr. Coulson mentioned the case of a gouty subject, who was suddenly seized with hæmorrhage from the bladder, complaining also, of a wearing, aching pain in the loins. There was afterwards, almost invariably, blood in the urine, at first diffused through the fluid, and passed without pain, and subsequently, in the form of coagula, with great pain. The discharge of blood suddenly ceased, and he was then affected with the symptoms of chronic inflammation of the bladder, with indications of calculus. He was sounded, but no stone could be discovered. There was great difficulty in passing the catheter, and moving it round the bladder; while doing this, a portion of morbid growth came away, which proved to be malignant. He was not sounded afterwards. The use of the catheter was attended with exquisite pain. The patient died in twelve months, worn out by intense suffering. For ten or twelve days before death the urine escaped involuntarily and without pain. The abdomen only was examined. The bladder and surrounding parts filled up the entire pelvis. The former was so soft, that it gave way in taking it out; its interior was filled with a mass resembling cauliflower excrescence of the uterus. It appeared to have arisen from the mucous and submucous tissue of the organ. Malignant disease of the bladder is only relievable by opiates, and the less done the better for the patient. The diagnosis in this case was only obtained by bringing away a portion of the diseased growth. The microscope might certainly be of use by detecting the existence of nucleated cells; otherwise there are no positive signs by which a malignant disease affecting the bladder can be detected before death, except from a fortuitous occurrence, such as was met with in his case.

Mr. Walton mentioned a case of carcinoma of the prostate, which occurred in his practice two years ago, and was supposed to be merely enlargement of that organ. The diagnosis of its malignant character was not made. The passage of the catheter always caused great pain. The urine was examined on several occasions by Dr. G. O. Rees, who did not discover nucleated cells in it. After some time blood was passed with the urine, and severe suffering attended micturition, causing the belief, that ulceration of the bladder had taken place. A few days before death an immense abscess burst in the perinæum. After death the bladder was found full of carcinomatous growth.

Mr. Hird wished to direct the attention of the Society to the means of arresting hæmorrhage from the bladder. He alluded to a patient under Mr. Dupasquier's care, an old man of seventy, who passed daily a pint of blood for a long while, and used many medicines, including gallic acid in large doses, and the muriated tincture of iron, but without benefit. No disease of the bladder could be detected. Whether it were the effect of the drug, or of accident, he could not tell; but the hæmorrhage ceased while he was taking the oxide of silver.

Mr. Dampier observed, that the diagnosis between stone and malignant disease of the bladder might be aided by remembering, that in stone there was seldom hæmorrhage after passing the catheter, or in the quiescent state; the contrary occurring in malignant disease.

Mr. Child commented on the absence of the general characters of the malignant diathesis when the bladder is affected. In Mr. Coulson's case, which he had seen, the patient was a stout, hale, healthy-looking man, and no one would have supposed, from his appearance, that he was labouring under so serious a disease as was going on in his bladder

Mr. Nunn stated, with reference to the use of the microscope in detecting malignant disease of the urinary organs, that in a case of Mr. Simon's, of superficial carcinoma of the prostate, the microscope was employed, the malignant character of the disease discovered, and the catheter, in consequence, was not again passed. Sir B. Brodie had seen the case, and remarked that it was the first in which malignant disease of the urinary organs had been detected during life.

Mr. Kesteven mentioned a case of hæmorrhage from the bladder, which he published some time since in the *Medical Gazette*. The diagnosis of malignant disease was not clearly made out, and some thought there was gouty disease, others stone. The muriated tincture of iron was of most service. It was looked upon as malignant, because the hæmorrhage continued while the patient was at rest.

Mr. Hancock referred to Dr. Lankester's case, with a view to the treatment. He recommended the non-use of the catheter, and the adoption of remedies to arrest the further progress of the disease. The best of these was opium. He described a case in which malignant disease was suspected, the hæmorrhage continuing while the patient was at rest. There was not much pain. The patient was laid on his back, and acetate of lead given to arrest the hæmorrhage. He became apparently well, and continued so for eighteen months. The disease then returned, and the same treatment was adopted, with a similar result. He would now be regarded as cured, but the anxiety of countenance causes the fear that malignant disease still exists. He (Mr. Hancock) could not see any reason for passing the catheter, unless there were other symptoms of stone present, which is not the case in the generality of instances of malignant diseases of the bladder.

Mr. Kesteven said, in his case there were some symptoms indicative of stone, but not all.

Dr. Sibson thought the microscope to be of more use in discovering the source of the hæmorrhage, than the presence of malignant cells. If it came from the coats of the bladder, it would not present the tubular casts from the kidneys. The source being discovered, would serve as a guide to the treatment. With regard to the pain, the exhibition of belladonna or stramonium would prove of considerable service. He (Dr. Sibson) had employed belladonna as a sedative, and found it completely controlled pain; it was not necessary to give it as often as opium, as its action was more permanent; it required, however, to be carefully watched. It would be useful to give opium with it, as the combination of narcotics is more powerful than even a large dose of any one singly.

Dr. Daniell thought, that as, in Dr. Lankester's and Mr. Coulson's cases, there was considerable pain in the loins, there might be a renal calculus passing along the ureter, and giving rise to the symptoms. He added, that, in disease of the bladder, the urine is alkaline, and not acid; this sign was an additional means of diagnosis. In all cases of disease of the urinary organs, the condition of the urine should be ascertained, as the persistence of alkalinescence might tend to irritation and disease of the mucous coat. In Dr. Lankester's case, he thought the disease originated in the kidney, and descended thence to the bladder. Turpentine, in small doses, will arrest renal and vesical hæmorrhage.

Mr. Gower, of Hampstead, said, that he had relieved pain, in two cases, by giving gum arabic. A quarter of a pound was consumed weekly.

Dr. Lankester, in reply, said, it was difficult to define the exact line between medullary sarcoma and fungus hæmatodes, unless in well-marked cases. He thought they were transition diseases, and still considered his case one of fungus. The principal malignant diseases of the bladder are of a soft kind, in which the cells easily break down, and are found in the urine. Dr. Sibson seemed to doubt the discovery of malignant disease under the microscope; the finding nucleated cells is not a diagnostic sign, as they are met with in fibrous and other tumours, interspersed among other cells; when, however, these cells are very numerous, then we may conclude that malignant disease exists. We cannot, however, affirm, that their absence is a proof of the non-existence of malignant disease, because the diseased growth may not have been broken down. In cases of hæmorrhage, the microscope may afford useful negative evidence. A gentleman had vesical hæmorrhage, and his medical attendant was much alarmed, as he dreaded malignant disease. The nucleated cells not being discovered, he was treated for simple hæmorrhage, and was now recovering. In Mr. Walton's case, there ought to have been the caudate cells in the urine—(laughter)—but unless they were especially sought for, they might have escaped notice. Mr. Simon's case was very important. Mr. Lane had diagnosed malignant disease in two cases by the microscope; in one, the patient had improved, under cautious treatment; the other was fatal. A large cerebriform mass was found in the bladder. There was neither renal nor vesical calculus in his case, as Dr. Daniell supposed. None ever passed, nor was any discovered after death. Disease does not often descend from the kidney to the bladder; the contrary generally takes place; and so, he believed, it was in his case. Dr. Sibson's remarks on belladonna he thought very important; he (Dr. Lankester) had not seen it used extensively as a sedative. Opium sometimes caused bad results; and if belladonna acted as a sedative, and more effectually, without those bad results, it had great claims on the profession, and should be had recourse to.

Dr. Sibson, in answer to questions, said, with respect to the doses of belladonna, he gave the extract in half-grain doses three times a day, in neuralgia, which, if there be no disease in the nerves, invariably yielded in a week. He now gave two doses of half a grain, and then gradually reduced to a quarter, one-sixth, and one-eighth. In sciatica, he employed it externally; internally it is of no use. The pain of dyspepsia is greatly relieved by it. Persons who are very sensitive, easily roused and easily depressed, are more than usually influenced by belladonna, and must take it in smaller doses. Its use should be given up when dryness of the throat comes on; that symptom precedes dilatation of the pupil,

The following is Dr. Sibson's prescription for external use:—

℞. Linim. sapon., co.; linim. opii, p. æ.; ex. belladonnæ, gr. x., xv., xxx. M. solve.

ROYAL INSTITUTION.

On the 25th, Mr. Brande delivered a highly instructive address, on Dr. Scoffern's new mode of purifying sugar. After some elementary remarks on the difference between cane and grape sugar, the former obtained from the maple, maize, palm, and ordinary cane, the latter from fruits, honey, &c., the lecturer explained the process of boiling, which, to economise heat, is now, it seems, done *in vacuo*, lime water being added to remove one set of impurities, blood and albuminous fluids another and not less obvious one. The point the lecturer seemed anxious to demonstrate, was Dr. Scoffern's improve-

ment, which consists in using, in place of these not very sightly, but, we believe, truly orthodox chemical compounds, a salt of lead—the sub-acetate—which removes effectually the colouring matter and acids, leaving the lymph quite clear. The very obvious danger, of course, is that of any of the salt of lead remaining—and it is impossible to say what the chapter of accidents might bring about. This it is proposed to remedy, by passing sulphurous acid through it, the sulphite falling to the bottom. The sulphurous acid Dr. Scoffern proposes to make by passing a current of air over burning sulphur, a plan not unknown in the Arts. We sincerely hope that the views of Dr. Scoffern will prove correct, and it gives us infinite satisfaction to find his plan sanctioned by so eminent a chemist as Professor Brande.

At a previous meeting, Mr. Grave explained some of the late researches of Regnault on Respiration, of Matteucci on the Relation between the "Direction" of the Electric Current, and its Effect on the Nerves, and alluded briefly to a discovery of Pasteur's on the molecular condition of some salts. With respect to the first, Regnault has corroborated, by actual experiment, some ideas floating about the medical world. Warm-blooded animals exhale nitrogen in proportion from 1-100th to 1-50th of the oxygen breathed. Animals deprived of food distinctly absorb nitrogen; animals unwell absorb more nitrogen; in animals fed on farinaceous food the carbonic acid exhaled is generally equivalent to the oxygen inhaled. Fed on animal food, the proportion of carbonic acid is much less in some animals,—not more than 6 to 10 parts of the oxygen inhaled. The consumption of oxyyen, as one might *à priori* expect, is many times greater in small animals than in large, owing no doubt to the exposure of a greater *proportionate* surface, and, consequently, to greater cooling effects of the air demanding more rapid respiration to keep up the animal heat. With hybernating animals Regnault found less oxygen of course consumed. They give off little carbonic acid, and absorb oxygen and nitrogen to such an extent, that they increase in weight, actually fatten on sleep. In "cold-blooded" animals very little oxygen is consumed; they breathe chiefly through the skin. Regnault makes the curious observation, that hydrogen might be substituted for nitrogen in ordinary atmospheric air, with little or no effect on the economy; and Mr. Grove actually showed some birds very lively in such a medium. He recommended carbonic acid to be more frequently used as a narcotic,—a dangerous one we should fear. Nature, who does nothing without a meaning, giving us more of this gas at night.

Matteucci's observations related to the fact, that when an electric current is passed with certain precautions in one direction, through the muscles of an animal, the motor nerves alone are those affected, the limb being convulsed *without pain;* while the current directed in a reverse direction, the nerves of sensation become affected, the animal cries from pain, but there is no muscular convulsion; in the former instance the current being directed from the surface towards the great nervous centres. How much of this is a mere physical consequence, how much physiological, it is not easy, perhaps, to say.

The observations of M. Pasteur, as we said before, had reference to the intimate molecular antagonism exerted by some salts, preserved even in their fluid state, one of those things not dreamt of up to the present in our "philosophy," yet destined to shed some light, perhaps, on the uses of the iron in the blood, the cyanides in saliva, &c.

CORRESPONDENCE.

PRESUMED DEATH IN UTERO.

[To the Editor of the Medical Times.]

SIR,—On the 10th inst. an Inquest was held in this town on the body of a female in humble circumstances, hourly expecting her confinement. She had eaten supper about half-past ten o'clock, and immediately after proceeded to bed; she undressed and lay down, but sat up again directly, saying to her husband, "Oh! feel my heart, I am going!" vomited blood and froth, and expired. The medical practitioner who arrived within a quarter of an hour, gave it as his opinion, that she died from disease of the heart, and a verdict, "Died from Natural Causes," was returned accordingly,

I thought it but right, as a juror, to ask whether the child was dead, and was told by the medical gentleman, in reply: "The instant pulsation ceases in the mother it ceases in the child." Thereby conveying to our minds the presumption, that the death of the mother and child were simultaneous. Now, although I felt a doubt at the time, as to this being true, still, obstetrics not being a part of my profession, I allowed the assertion to pass uncontradicted, considering that a medical practitioner, of so many years' experience, would not have made so positive a statement if it were not founded on authority. However, not being quite satisfied, I afterwards consulted an authority or two, and some professional friends, and was led to believe this to have been a proper case to attempt the Cæsarean operation.

Having thus stated the fact, I should feel obliged by your opinion, whether a medical man is not in duty bound to perform the Cæsarean section under the circumstances I have detailed.

I am, Sir, your obedient servant,

JURATOR.

Chatham, January 23, 1850.

[It is certainly to be regretted that the Cæsarean operation was not performed in this instance. The Surgeon, however, might have been a pupil of Malthus.—ED. *Med. Times.*]

THE COUNCIL OF THE COLLEGE OF SURGEONS.

[To the Editor of the Medical Times.]

SIR,—At a private meeting of a few friends of the Medical Profession, held to-day in this town, the question has been mooted, whether the Council of the College of Surgeons have not violated the contract entered into by their bye-laws, at the time of the granting of their diploma to the members, prior to the obtaining of the Charter of 1843, and have rendered themselves thereby liable to proceedings both in law and equity for damages? If the Council of the College, at the present juncture, do not feel themselves disposed to confirm and ratify *the mutual obligations sworn to by a solemn oath*, would it not be a matter of *policy as well as expediency* to advise every member in general practice *at once to return* to that College his diploma, and demand a return of his twenty guineas, the license of the Apothecaries' Society being, in most cases, sufficient for the protection of General Practitioners? An opinion in your next publication will kindly oblige, Sir, your very obedient servants,

JOHN SPENCE, Manchester.
GEORGE GIBSON, Ulverston.
EDWARD HALL, Dalton-in-Furness.

Ulverston, Jan. 30, 1850.

[We think that there is some ground for assuming that an action would lie against the Council of the College in consequence of the injury sustained by the members by the creation of the Order of Fellows under the Charter of 1843. If the contract implied by the Bye-laws can be understood as conferring specific advantages upon the Members, which have been lost or impaired by the provisions of the new Charter, there would be some tangible ground for proceedings against the Council. If a special injury could be shown, so much the better. Law is, however, a dangerous thing to meddle with. It is a very good weapon in prudent hands; but if our Correspondents should happen to take hold of the wrong end of the iron they might burn their fingers. Nothing would be more pleasing to us than to see some public-spirited surgeon obtain a verdict against the Council upon this ground; and we venture to prophesy that, in such case, the applications for redress would be so numerous, that the Council would be but too happy to vacate their seats, and a new Charter would be obtained within a month.—ED. *Medical Times.*]

MR. BOTTOMLEY AND MEDICAL REFORM.

[To the Editor of the Medical Times.]

SIR,—So far as I can understand the proceedings of Mr. Bottomley's party, they appear to me to be falling back upon the position occupied by the National Association in the year 1845; and are, therefore, merely the imitators of the original policy of that Society. Whether the policy that failed then will succeed now is yet to be determined; but, if there be any consistency in the councils of the ruling powers of the College of Surgeons, no important concessions can be expected. In such case the recent Memorialists are only throwing impediments in the way of a settlement upon principles that have been acceded to, and arranged only after a long and arduous contest, and thus all the fruit of a five year's agitation will be lost. I do not think, however, that such a result can possibly ensue, if the good sense of the Profession will only be true to itself.

Mr. Bottomley's party require a fair representation in the Council of the members of the College, with restitution of the rights of the members who were degraded by the Charter of 1843.

They also desire the establishment of an examining Board in medicine, surgery, and midwifery.

Now, Sir, the National Association have been often reviled for not having made an effort to obtain such a settlement; but, with how much justice these statements have been made, the following quotation from their letter, bearing date March 20, 1845, to the President and Vice-Presidents of the College of Surgeons, will show:—

The National Association "request the favour of an early answer to the following inquiries:—

"First.—Is the Council of the College prepared to reconsider their Charter, and to place those members who were in practice before it was granted on a level with the Fellows?

"Second.—Is the Council of the College disposed to admit to its Board a fair representation of the members of the College in general practice?

"Third.—Would the Council of the College be willing to co-operate with the National Association in the formation of a Court of Examiners in medicine, surgery, and midwifery?"

The reply to this communication will be ever memorable. It was in this well-known document that the Council described the members as practitioners, "required to possess *at least*, but not necessarily more than that amount of information and skill which is *absolutely* required for the *ordinary exigencies* of surgical ministrations."

The reply throughout was distinguished by the same supercilious tone, and ended with a rejection of the proposals of the National Association. Let, therefore, due justice be rendered to this body for its efforts, and if Mr. Bottomley's party should succeed, the Profession will be prepared to do justice to them too. It must not, however, be forgotten, that Mr. Bottomley would never have put his foot inside the threshold of the College of Surgeons if the National Institute had not handsomely lent him the influence of its name and character; and by the act of calling a Conference, made a second attempt to open the College of Surgeons to its members.

I am, Sir, your most obedient servant,

A MEMBER OF THE NATIONAL INSTITUTE.

Brighton, January 9, 1849.

THE CHOLERA.

[To the Editor of the Medical Times.]

SIR,—On the 7th of the current month I was called upon to see a woman who was reported as being very ill. On my arrival at the house, to my surprise I found her labouring under a severe attack of algid cholera. The appearance of the patient was anything but promising. The attack came on during the night, and was suffered to go on during the several hours intervening my visit and the advent of the disease. The countenance at this time had the peculiar cadaveric expression which is only seen in persons thus suffering. The eyes sunken, the face pinched, the voice husky, the extremities cold, the fingers shrivelled, with considerable cyanosis; the pulse quick and thready; incessant dejections of a milk-and-watery character, and profuse; the legs and thighs contracted with rigid spasm, and the thirst intensely urgent; shortly after this, vomiting set in of a clear serous nature, and abundant; there was no urine secreted; in fact, there was a case of pure Asiatic cholera. I immediately prescribed pulv. opii gr. j.; hyd. protochlorid. gr. ij. every hour, with small doses of the mist. creta (p. l.), with sp. ammon. co. ℥ss., every two hours; friction to be used to the parts suffering from spasm, the abdomen to be covered with mustard poultices, and to abstain from fluids as much as possible. Matters went on without any improvement until night, when the purgings began to be less frequent and not so profuse; but the vomiting seemed to be increased by the creta mixture, which was omitted. During the night the state of the patient began to assume a much better aspect; the cramps in a great measure abated, less vomiting and purging; and from this

…dual convalescence, with slight …idneys. She had taken in all …m, with twelve of calomel.

…d day from this attack two more of …e seized with choleraic diarrhœa, as …rse of the patient first attacked; small …l doses of opium and acetate of lead were …ith happy results, and all are now doing …

It may be here necessary to state, that this woman was the widow of a man who died of cholera in June last. She had nursed and watched him without any bad effects to herself at the time. She continued to inhabit the house he died in up to the 3rd of January (current), when she removed to the house she now occupies. During the removal of her goods, the deceased husband's clothes and linen (the latter having been washed) in which he died, after being put aside and suffered to remain undisturbed, were necessarily disturbed also.

Remarks.—Two things are particularly worthy of notice in this case, and have a strong bearing upon the theory of contagion.

1st. The genesis of the disease.—There have been no cases in this neighbourhood since the early part of last October. The woman now lives in a locality where there never was any cholera whatever. There are no cesspools or other native places of generation, and we have at this time a most intense frost, which must, as a natural consequence, prevent any noxious emanation.

2nd. There is no other case than in the family; the fact of the nurse also having a similar (though less severe) attack.

Now the question may be raised—what was the cause? Could this depend upon the virus remaining dormant in the system of the first patient, and from some given cause called thus suddenly into action? or could it depend upon some contagious principle contained in the clothes of the deceased husband? Certainly atmospheric causes seem to have little to do with it; or else why only the cases referred to? I think we may fairly and reasonably infer the second proposition will solve the problem, that it did depend upon some contagious principle latent in the clothes (which, by the way, I ordered to be burnt). If it depended upon the first, why not developed at a more early period, when weather, the currency of the disease in the place, &c., were all direct inciting causes for its attack?

I have simply stated these facts to assist my more talented professional brethren in settling the "questio vexata" of contagion, not that the contagiousness or non-contagiousness of cholera will materially alter any given plan of treatment, but what is of paramount importance to point out to us, to use all the prophylactic means we have in our power to prevent its spread, and check this devastating scourge, if we are subjected to a return of this most fearful epidemic.

I am, at the present time, a convert, and as convinced in my own mind of cholera being contagious, as I was, in the first instance, of the contrary. Stubborn facts will, in sensible minds, beat all theorising. With regard to the treatment in this case, I can only testify to the efficaciousness of calomel and opium. I had ample opportunities of trying the various plans of treatment, sensible or otherwise, and have seen, unfortunately, all alike fail. Calomel and opium is, however, my sheet anchor. In one case I administered calomel in repeated doses, according to Dr. Ayre's plan; the case did well, I must say, and it was one of the worst I had. In others it was as signal in its failure. Dr. Stevens' salines shared the same fate, and I was induced to give up his idea.

To discuss the pathology of cholera is not here my intention, as it would be trespassing too much upon your valuable space; and as we have already had so much of this subject, though with profitless results, as the old adage has it, "Too much of a pudding," &c., I would, however, notice in conclusion, one peculiarity marking the disease, its attack being for the most part during the night or early morning, and these cases almost invariably assuming the most malignant form. How is this accounted for? Probably it may be in consequence of the wear and tear, exertion mental or physical, &c., during the preceding day, so reducing and prostrating the nervous energy, that the system is not so well adapted to resist or combat the virus. On the other hand, a good night's sleep so invigorates the system, that it is better enabled to withstand its influence. Dr. Webster thinks, in his paper on the Health of the Metropolis during the past year, it depends upon the coldness and chilliness of the nocturnal atmosphere; it may be so, but I think the former is more likely.

G. B. Barron, M.R.C.S.L.

Southport, Jan. 22, 1850.

Kensington Dispensary.—Mr. Newcomb has been appointed resident medical officer to this Dispensary.

Renal Anomaly.—Mr. Turner, butcher at Spittal Moss, lately slaughtered a cow, having three perfect kidneys on the left side, and one on the right. The animal was in other respects perfectly natural.

HEALTH OF LONDON DURING THE WEEK ENDING JAN. 26.

The deaths registered in the metropolitan districts, in the week ending last Saturday, exhibit a decrease of 122 on those of the previous week. A comparison of the same weeks of former years shows that the mortality has not been so low as at the present time since 1846; in the early part of the years 1847-9, the deaths ranged weekly from 1200 to about 1450. The average of corresponding weeks, in ten previous years, (1840-9,) is 1084; or, if a correction is made for increase of population, 1183; compared with which the present return shows a decrease of 49 deaths. The deaths from consumption were rather less than the average. Amongst other fatal diseases bronchitis is now predominant, and last week carried off 121 persons,—a number which, though less than in the week before, exceeds by 51 the corrected average of ten corresponding weeks of former years. It is worthy of remark, that this complaint, which has exceedingly increased during the last six years, has, since 1844, produced at this season a weekly mortality more than fourfold its former amount. Pneumonia was fatal to only 78 persons last week, (a great majority of whom were children,) whilst the corrected average of ten corresponding weeks is 109; this disease, though it has fluctuated in its weekly numbers from 64 to 156, has not shown the same disposition as bronchitis to increase during later years. The deaths of 7 nonagenarians were registered last week; of these, a woman at the age of 96 years, and a man at 99. The deaths of 105 persons were registered in workhouses; 57 in hospitals; and 13 in the two Royal hospitals, amongst whom were 7 pensioners at Greenwich, who died between the 18th and 24th of January, at various ages from 37 to 84. The mortality from epidemics continues to be comparatively low, though measles and diarrhœa (from the former there having been 28 deaths, and from the latter 14,) are about the average.

The mean daily reading of the barometer at Greenwich was above 30 in. on the first five days of the week; the mean of the week was 30·050. The mean daily temperature rose from 29° on Sunday to 45° on Friday; the mean of the week was 35·5°, which is rather less than the average of the same week in 7 years. The mean temperature was 9° below the average of the same day, on Monday; on Friday, it was 8° above it.

The deaths in the several hospitals of London occurred as follow:—

Kensington House Asylum	0	St. Bartholomew... ...	9
Lock	0	Miles' Lunatic Asylum...	0
Consumption, Brompton	0	Warburton's Lunatic Asylum	0
Brandenburgh-house Lunatic Asylum	0	London	5
Royal Military Asylum	0	Portuguese Jews' Hospital	0
Blacklands-house Lunatic Asylum	0	Lunatic Asylum, Bow ...	0
St. George...	2	Guy's	1
Grenadier Guards' Hospital	0	St. Thomas	7
Westminster	4	Bethlem	0
Charing-cross	1	St. Peter's Hospital ...	0
Middlesex...	1	Lunatic Asylum, Brixton	1
Queen Charlotte's Lying-in Hospital	0	New County Lunatic Peckham House Lunatic Asylum	5
University College ...	4		2
Small Pox...	1	Camberwell House Lunatic Asylum	2
Fever Hospital	0	Dreadnought Ship ...	7
Northumberland-house Lunatic Asylum ...	0	Devonshire Ship... ...	0
Invalid Asylum, Stoke Newington	0	Unité Hospital Ship ...	0
German Hospital... ...	1	Royal Ordnance	0
King's College	4	Royal Hospital, Chelsea (South)	4
St. Luke	0	Royal Hospital, Greenwich (East)	9
City of London Lying-in	0		

MORTALITY TABLE.

Deaths in the Week ending Saturday, Jan. 26, 1850.

(Metropolis.)

Causes of Death.	Total.	Average of Ten Weeks.
All Causes	1034	1034
Specified Causes	1018	1076
Zymotic (or Epidemic, Endemic, and Contagious) Diseases	158	201
Sporadic Diseases:		
Dropsy, Cancer and other Diseases of uncertain or variable seat	45	54
Tubercular Diseases	175	187
Diseases of the brain, Spinal Marrow, Nerves, and Senses	120	126
Diseases of the Heart and Blood-vessels	32	30
Diseases of the Lungs, and of the other Organs of Respiration	252	230
Diseases of the Stomach, Liver, and other Organs of Digestion	64	61
Diseases of the Kidneys, &c.	9	9
Childbirth, Diseases of the Uterus, &c.	8	13
Rheumatism, Diseases of the Bones, Joints &c.	7	7
Diseases of the Skin, Cellular Tissue, &c.	3	
Malformations	6	8
Premature Birth and Debility	31	22
Atrophy	22	12
Age	51	77
Sudden	12	14
Violence, Privation, Cold, and Intemperance	23	28
Causes not Specified	16	7

The following is the number of Deaths occurring from some of the more important special causes:—

Apoplexy	26	Heart	30	Phthisis	128
Bronchitis ...	121	Hooping-cough	27	Pneumonia ...	78
Cholera.....	...	Hydrocephalus	26	Scarlatina	16
Childbirth	5	Influenza	2	Small-pox	8
Convulsions...	38	Liver	17	Stomach	11
Diarrhœa	14	Lungs	6	Teething	9
Dropsy	16	Measles	28	Typhus	37
Erysipelas ...	6	Paralysis	34	Uterus	2

BIRTHS AND DEATHS.

	Births.	Deaths.	Births over Deaths.
Males	766	508	258
Females	728	526	202
Total.....	1494	1034	460

METEOROLOGY OF THE WEEK.

Day.	Mean of Barometer.	Mean of Thermometer. Dry.	Ditto. Dew Point.	Difference between the Mean Temperature of the day and the same day on an average of 7 years.	General Direction of Wind.		Amount of Horizontal Movement of the Air.	Rain in Inches.	Electricity.*
					A.M.	P.M.	Miles.		
Sunday	30·031	28·3	20·8	— 8·7	N.E.	N.E.&S.E.	55	0·00	No electricity was exhibited at any time of examination during the week.
Monday	30·227	28·5	23·5	— 9·1	S.E.	E.	30	0·00	
Tuesday.....	30·381	32·2	29·5	— 5·3	E.&S.E.	S.W.	65	0·12	
Wednesday.	30·327	36·4	34·1	— 1·1	S.W.	W.S.W.	95	0·10	
Thursday...	30·187	34·0	33·2	— 3·5	W.S.W.	S.W.	150	0·00	
Friday	29·756	42·4	41·0	— 8·2	S.W.	S.W.	275	0·00	
Saturday ...	29·401	43·5	38·4	+ 6·3	S.W.	W.S.W. & N.	235	0·20	
Means ...	30·050	35·5	31·5	— 1·9	E. and S.W.		SUM 905	SUM 0·32	

* In this Column, A. stands for Active; N. for Negative; and P. for Positive.

MEDICAL NEWS.

APOTHECARIES' HALL.—Names of gentlemen who passed their examination in the science and practice of Medicine, and received certificates to practise, on Thursday, Jan. 24, 1850:—Samuel William North, York; Henry Tregelles Fox, Dunmow, Essex; Charles William Latham, London; James Hamilton Davies, as an Assistant, Haverhill.

OBITUARY.—At Exeter, of chronic bronchitis, Edward Oxley, M.D., aged 80.—On the 22nd ult., at Worcester, Samuel Good, Esq., one of the surgeons in ordinary to H. R. H. Prince Albert, and formerly surgeon-major to the Scots Fusileer Guards.—On the 25th ult., suddenly, Mr. House, surgeon, of Walham-green, Fulham, aged 53.—Dr. Fitton, and Mr. Gale, surgeon, drowned in the wreck of the Richard Dart, transport ship.

EVAPORATION FROM THE THAMES.—A larger quantity of matter is raised from the Thames by evaporation than is generally supposed. Upon Mr. Glashier's estimate, 678,505 gallons evaporate from an acre of water in a year, which is at the rate of 1857·6 gallons daily. The bed of the Thames in London is estimated approximately at 2245 acres; consequently, 4,170,000 gallons are raised on an average daily through the year. The quantity evaporated at low water is, perhaps, much less than this; on the other hand, the evaporation in summer is more active than in winter; and the proportion of decomposing organic matter in the water, and on the banks exposed to evaporation, is greater at low than at high water. Upon the whole, it is probable that in summer 4 million gallons, or about 18,000 tons of water, are raised from the polluted Thames daily and discharged into the atmosphere which is breathed by the inhabitants of London. It remains to determine how much of the organic matter in the water is raised with the vapour at different temperatures. Mr. Glashier was requested to make an estimate of the amount of vapour raised by evaporation from the Thames, and has favoured the Registrar-General with the subjoined statement:—"For some years past I have made daily experiments upon the amount of water evaporated from a surface of water, and the amount exceeds 30 inches annually. A depth of water of fully 30 inches must evaporate from the surface of the Thames annually; indeed, the quantity must be larger than this from the circumstance of its relative high night temperature. Take it, however, at 30 inches, and we shall have 108,900 cubic feet evaporated in a year from an area of water of one acre; 678,505 gallons of water evaporated in one year from an acre of water; 244,480,500 cubic feet of water evaporated from a surface of 2245 acres of water in one year; 1,523,242,991 gallons of water evaporated in one year from a surface of water of 2245 acres in extent, or more than 1523 millions of gallons. The salt water affects the water at Woolwich: it is usually what is termed brackish there. Lieut. Sanders states that at Greenwich, at high-water spring tides, the water is frequently brackish. The dirt and filth in solution must be very large. The 'Dreadnought' experiments are made under my direction chiefly, and I can assure you that to read the instruments is a serious affair, owing to the filth of the waters; on first pulling them up they are covered with a slimy adhesive mud; they first have to be wiped, and if the wind is blowing strongly, this muddy water is blown about and over the observer. A new trunk is now being made, with a perforated copper-bottom turning downwards upon hinges, so as to get rid of the enormous deposit."—*Weekly Return of the Registrar-General.*

MORTALITY IN LIVERPOOL DURING 1849.—According to the Report of Dr. Duncan, the Medical officer of health, the deaths in Liverpool, during the 52 weeks ending Dec. 29, 1849, were 17,046, being 4500 more than the preceding year, and 3900 more than the average of the previous five years. If we exclude 1847, the year of the Irish fever epidemic, the excess is 6200; compared with that year there is a decrease of 3800, the mortality in that year amounting to 20,850. Of the 17,046, 8400 were males, and 8646 females. Cholera destroyed 5245; diarrhœa and dysentery, 1271; typhus, 567; measles, 419; hooping-cough, 376; scarlet-fever, 317; croup, 113; small-pox, 68; and syphilis, 42. The larger proportion of deaths from cholera was among females, to the extent of 23 per cent. more than the males. The sudden and violent deaths requiring inquests amounted to 460; of which 316 were males, and 144 females. 64 of these were by drowning; 54, burns and scalds; 30, overlain; 144, accidentally killed; 4, accidentally poisoned; 11, wilful murder; 7, manslaughter; 10, excessive drinking; 5, want of food; 104, natural disease; 27 suicides—of these, 9 by hanging; 8 cut-throat; 3, poison; 2, shooting; 1, jumping from window; 3, *felo de se*. The rate of mortality was highest in Scotland and Vauxhall Wards, where it was nearly 1 in 14; and lowest in Rodney-street and Abercromby Wards, where it was nearly 1 in 38. For the entire borough the rate of mortality was about 1 in 21.

GRATIFYING TESTIMONIAL.—On Wednesday, January 16th, there took place in the public school-rooms at Putney a meeting of a very interesting description, convened for the purpose of presenting a testimonial to the medical officer of the district, Mr. R. Harland Whiteman. The testimonial, for the purchase of which several hundreds of inhabitants—from the peer to the peasant—had subscribed, consisted of a handsome silver tankard and salver, manufactured expressly for the occasion, together with a valuable gold lever watch, upon each of which gifts was engraved a suitable inscription, indicative of the sense entertained by the subscribers of Mr. Whiteman's "zealous and efficient services as the medical officer of the district during the late visitation of cholera." The presentation was prefaced by a suitable address from the officiating minister of the parish, the Rev. Edward East, to which Mr. Whiteman subsequently replied at considerable length.

PRIVATE LUNATIC ASYLUMS.—In the course of an investigation at the Middlesex Sessions, on Friday last, respecting the removal of a pauper lunatic, it appeared that the authorities of St. Marylebone had been engaged in making a profitable speculation of the lunatic paupers belonging to other parishes, but resident in theirs. They had, it seems, converted a building, which the judge averred to be part of the workhouse, although a distinct and separate erection, into a pauper lunatic asylum, for which they had obtained a license in the joint names of the resident physician and the master of the workhouse, who were the registered proprietors. The Legislature has provided, and very wisely, that pauper lunatics are not to be detained in workhouses; contrary to the spirit, yet, perhaps, in obedience to the letter, of that law, have the Marylebone authorities acted. Their proceeding was characterised by the judge as a direct evasion of the law. On this point, however, we wish not to dwell, but would rather draw attention to the extraordinary conduct of the resident physician, who, with the master of the workhouse, has lent the sanction of his name to the perpetration of a dirty job. We know not whether the parties seeking a license for a lunatic asylum are obliged to swear that they are the *bonâ fide* proprietors; at all events, we presume that, either *viva voce*, or in writing, they state themselves to be such, and, in either case, the registered proprietors of the Marylebone Parish Lunatic Asylum have committed a gross breach of the law against leasing makers, which was in force in Queen Elizabeth's time, and, perhaps, is not yet repealed. It was proved, at the trial that *neither of the parties named as proprietors had any interest in the building, and that the amount named as having been paid to them by the overseers* (namely, the amount charged for the alleged lunatics) *had not been paid.* There are fifty female and thirty-five male lunatics in the asylum, and the cost is 9s. per week for each. The parish charge is 12s. for each pauper lunatic maintained by them, if belonging to other parishes; making thus a clear profit of 3s. per head weekly. How can the Profession expect to be held in esteem by the public, when its members lend the sanction of their names to such dirty proceedings. The case, however, will not end with the public exposure it has already received. A case has been granted for the Court of Queen's Bench, and then it will be seen whether the parish of Marylebone are to ride rough-shod over law and justice, and drag down members of the medical profession into the mire in which they themselves choose to wallow.

SINGULAR OCCURRENCE BEFORE A CORONER.—An extraordinary and, perhaps, unprecedented circumstance occurred at the village of Whitchurch, in Bucks, a few days since. An inquest was held before Mr. J. Parrot, one of the coroners for the county, on the body of a female infant, of which the mother, Sarah Evans, the wife of a labourer, had been recently confined, and which, it was supposed, had died shortly after its birth. After the surgeon, Mr. Spencer, and the mother's nurse had been examined, the jury returned a verdict to the effect that the child had died from natural causes. The jury had not been long dismissed when it was discovered that they might have been saved all inquiry on the subject, for the infant was found to be alive, in good health, and likely to live longer than many of the jury who returned a verdict that it had "died from natural causes."

TO CORRESPONDENTS.

"Studens" asks our advice as to what books he should to counteract the tendencies to infidelity to which *says*, his present course of study leads.

[We will not here enter into the question as to the tendency of Professional studies to infidelity. We do not believe that such is the case; and we will take some opportunity of considering this very important question. Neither will we here trust ourselves to reply to our Correspondent. Let others answer for us. And, first, Young:—

"Read Nature! Nature is a friend to truth;
Nature is Christian—preaches to mankind,
And bids dead matter aid us in our creed."

And now Bacon:—

"There are two books laid before us to study, to prevent our falling into error: first, the volume of the SCRIPTURES, which reveals the will of God; then the volume of the CREATOR, which expresses His power; the latter of which is a key to the former, opening, not only our intellect to conceive the genuine sense of the Scriptures—which is to be drawn out by the general rules of reason and laws of speech,—but, besides that, unlocking our faith also, to enter into a serious meditation of the Omnipotence of God, the characters whereof are chiefly signed and engraven on his works."

The great truths of Christianity rest on foundations far more solid than that of Physiology; and we agree with an eminent writer and one of the first surgeons of the day, that if these could be endangered by physiological discussions, it would be by unsettling them from their natural and firm establishment, and erecting them anew on the artificial and rotten basis of unsubstantial speculations, or on the equally unsafe ground of abstruse metaphysical researches. "I have no hope of a future existence," says a late Cambridge Professor of Divinity, "except that which is founded on the truth of Christianity." For ourselves, we think no one could prove the existence of an immortal soul from any phenomena of thought.]

"A Wingless Bee" need only produce for the College, certificates showing he has been five years in the acquirement of professional knowledge. For the Hall we believe the indenture is necessary.

"A Young Surgeon."—An advertising surgeon is anything but respectable. In a small locality such as our correspondent alludes to, there can be no difficulty in breaking ground in a more legitimate manner.

"A Physician and Resident Proprietor."—We will publish our Correspondent's letter next week.

"An Old Subscriber to the 'Medical Times'" will be privately written to, if he forwards his name and address.

"Dr. James Stevens'" remarks on Dr. Jeaner's papers on Typhus Fever will receive early attention.

The remarks of Dr. Duncan and Mr. Nunn, of Colchester, on the applicability of the common Sweet Almond Oil to all cases in which Cod's Liver Oil is prescribed, will be published in our next Number.

"Bishop's Study of the Mind" has been consigned to a gentleman for review. It will be noticed in due course.

"M.R.C.S."—The obliging note has been received.

We have to acknowledge the receipt of a report on cholera, as occurring in the 59th Regiment, on board H.M.S. Apollo, on the voyage from Cove to the Cape of Good Hope, by Dr. Fraser, Assistant-Surgeon 10th Royal Hussars, in medical charge of the 59th Regiment, obligingly communicated by Sir James McGregor.

Mr. Harvey's Cases we hope to publish next week.

Mr. Yearsley's paper has been received, and will immediately follow Mr. Harvey's, on the same subject.

"Mr. Gibbons'" contribution "On the Microscopic Appearances of Bone and Cartilage," will be published as soon as possible.

WE must take a more comprehensive view of cutaneous maladies, and study this class of affections more in the light of general diseases, if we wish to arrive at an accurate knowledge of their nature; for observation proves, that the study of diseases of the skin cannot be detached from that of general pathology, and of the many morbid conditions with which they have such numerous and varied relations. Indeed, it would be a grave error to separate certain cutaneous eruptions from lesions of other systems, when both derive their origin from the same cause, and are, in reality, but different symptoms of one and the same disease. The eruptive fevers and the syphilides, for example, are constitutional diseases, or rather the sequelæ of constitutional diseases, and to view them in the light of special or local affections, would be to mistake their nature altogether. Erysipelas and acne frequently supervene in cases of derangement of the uterine functions. Strophulus is associated with the process of dentition. Urticaria, lichen urticatus, and several varieties of herpes, are often the results of a disordered condition of the digestive organs. Psoriasis and lichen agrius frequently occur during the progress of gout and urinary diseases; and the hereditary nature of certain diseases, as lepra, psoriasis, lichen, is beyond all doubt.—*Dr. Burgess on Eruptions of the Face, &c.*

ORIGINAL LECTURES.

HUNTERIAN LECTURES
ON THE
GENERATION AND DEVELOPMENT OF THE INVERTEBRATED ANIMALS.

By RICHARD OWEN, F.R.S.,
Hunterian Professor and Curator of Museum of Royal College of Surgeons, Corresponding Member of the Institute of France, &c.

[Reported expressly for the "Medical Times," and revised by the Lecturer.]

LECTURE XVI.

GENERATION OF INSECTS.—Development of the ova; virgin generation of the aphides: its true conditions and analogies explained—Supposed parthenogenesis of the *Psyche* explained by the peculiarities of their impregnation—Various forms and appendages of the ova of insects—Cocoons and other nidi—Oviparous, larviparous, and pupiparous Insects—Striking evidence of design in the instincts of oviposition—Development of the embryo: various grades of this at which it quits the ovum.

MR. PRESIDENT AND GENTLEMEN,—So far as regards the organic machinery for propagation, that mechanism has reached its highest grade of complexity in the class of insects. In the male individuals we have found "testes," "epididymys," "vasa deferentia," "vesiculæ seminales," "prostates," "penis," and "claspers:" with a hundredfold variety in the forms and proportions of the several parts. In the female individual we have seen, besides the ovaria and oviducts, special enlargements of the latter, to which the name of "uterus" might be applied, seeing that in certain insects the embryo was developed therein; and the vagina was complicated with a spermatheca, bursa copulatrix, colleteria, vulva, ovipositor, and copula. As might be expected from the very common form of the ovaria, as long and slender tubes, they offer peculiar facilities for tracing the development of the ovum as such. Professor Wagner has ably availed himself of this peculiarity in tracing out the progressive steps in the formation of the ovum, and has given good descriptions of the process in his work, entitled, "Beiträge zur Geschichte der Zeugung und Entwickelung," illustrated by figures of the parts, and the progressive stages of the ovum in the female dragon-fly (*Agrion virgo*.) The germs of the ova first appear in the capillary beginning of the ovarian tube as a single file of minute elliptical granules or nuclei: as the tube expands the cell-wall appears surrounding the first part, and the ovum is now in the condition of a minute pellucid vesicle, having a central nucleus. Such nuclei and nucleated cells make their appearance in the capillary beginnings of the ovarian tubes, where they are drawn out to microscopic tenuity. From these extremities the ova successively pass into the wider part of the tubes, and in this course increase in size by the expansion of the nucleus, and by the multiplication of vitelline granules around the primitive cell: at first the ova are separated from each other by an amorphous granular substance of equal size, which is called a placentula, but lower down by mere constrictions of the ovarian tube. Here the ova acquire a distinct vitelline membrane, and then, continuing to increase in bulk by the addition of vitelline matter, they reach the converging end of the ovarian tubes, and enter the shorter and wider oviduct. Here they receive additions to their external surface from the secretions of the colleterial organs, and admit into their interior the mysterious principle of the male fluid, which would seem to be assimilated into their substance, more especially into that of the central nucleated germ-cell.

It is essential to the development of the embryo, that the germ-cell receive the matter of the spermatozoon; the ovum is then said to be impregnated.

The phenomena that thence ensue are essentially the same up to a certain point in all animals, and consist in the propagation on the part of the impregnated germ-cell, by a series of reiterated spontaneous divisions, of a numerous offspring. The right and clear comprehension of the purpose of this process, or the object effected by it, is essential, as I have already endeavoured to show, to the elucidation of the nature and relations of the subsequent modifications and varieties in the course of development. The progeny of the primary impregnated germ-cell are the "secondary or derivative germ-cells," and the whole is the "germ-mass."

The progeny of the impregnated germ-cell resemble their parent in all respects, save that they show a diminution of size. When they cease to exist as germ-cells, either by coalescing with others or by liquefaction, they do not lose their vitality; as individuals, indeed, they may be said to die, but by their death they minister to the life of a being higher than themselves; they combine to construct its tissues, or dissolve and impart properties to its fluids; these metamorphoses being mysteriously governed by a plastic nature or mode of force operating unconsciously upon the matter; but, according to a law of order and harmony, and directed to a fore-ordained and definite end, resulting in a distinct and specific form of animal, adapted by its organization for a particular sphere of existence, and forming a more or less valuable, but not, as once was thought, an essential link in the great chain of organic life.

It is important, however, to bear in mind, that not all the progeny of the primary impregnated germ-cell are required for the formation of the body in all animals; certain of the secondary germ-cells, or their nuclei, may remain unchanged, and become included in that body which has been composed of their metamorphosed and diversely combined or confluent brethren. So included, any such cell, or its nucleus, may commence and repeat the same processes of growth by imbibition, and of propagation by spontaneous fission, as those to which itself owed its origin; followed by metamorphoses and combinations of the cells so produced, which concur to the development of another individual; and this may be, or may not be, like that in which the secondary germ-cell was included.

In the previous Lectures we have seen that, in proportion as the subjects of anatomical investigation descend in the scale of animal life, the number of the derivative nucleated cells which retain their individuality and spermatic power is greater, and the number of those that are metamorphosed into tissues and organs less.

Cells predominate in the tissues of the vegetable kingdom, the lower members of which consist exclusively of them, and have been thence called "plantæ cellulares:" the lowest of all consist of a single cell.

We have seen that the animal kingdom starts from the same elementary beginning: a cell-wall forms the smooth elastic and contractile integument of the *Gregarina:* a fluid and granules, with a firm nucleus, containing sometimes a nucleolus—the ordinary cell-contents—are the sole representatives of organs or viscera. Yet the power of the *Gregarinæ* to live and grow independently by assimilating foreign nutriment, the vital contractility of their tegumentary tunic, their chemical composition, and their definite forms, with such well-marked specific characters, in a few instances, as the *Greg. brevirostris* and *Greg. Sieboldii* present, render their interpretation, as a low and primitive form of parasitic animal, the most accordant with actual physiological and zoological knowledge.

A large proportion of the nucleated and impregnated cells is retained unchanged in the compound hydriform Polypes and in the parenchymatous Entozoa: a smaller proportion in the Acalephæ and cavitary Entozoa. We find derivative germ-cells and masses of nuclei like those resulting from the final subdivision of germ-cells retained unchanged at the filamentary extremities of the flabelliform uterus, and forming the ovaria of the larval *Aphides*. By the observation of this phenomenon in the newly-hatched larval *Aphis* from the ovum deposited by the oviparous species, and by reflection on the relation of the observed germ-masses to the successive spontaneous fissions of the primary impregnated germ-cell, and to the effect of such spontaneous fissions in the subdivision and diffusion of the spermatic force, I arrived, some years ago,(a) at what I felt to be a clear insight into the circumstances which rendered the successive generations from virgin Aphides possible and conceivable, and I have the greater confidence in the truth of that insight from having found it equally explanatory of the analogous phenomena of "Lucina sine concubitu" in other animals.

It is now more than a century since Bonnet, in his "Traité d'Insectologie," 8vo., 1745, first attracted the attention of physiologists and naturalists to this mode of generation in the *Aphides* or plant-lice. And because it was the first of a large class of phenomena, till then utterly unknown and unsuspected, it was received with considerable doubt, or met by total incredulity.

The facts are briefly these:—

The impregnated ova of the Aphis are deposited, at the close of summer, in the axils of the leaves of the plant infested by the species, and the ova retaining their latent life through the winter, are hatched by the returning warmth of spring; a wingless hexapod larva is the result of the development. This larva, if circumstances, such as warmth and food, be favourable, will produce a brood, and indeed a succession of broods, of eight larvæ, like itself, without any connexion with the male. In fact, no winged males, at this season, have appeared. If the virgin progeny be also kept from any access to the male, each will again produce a brood of the same number of aphides; and carefully prosecuted experiments have shown that this procreation from a virgin mother will continue to the seventh, the ninth, or the eleventh generation before the spermatic virtue of the ancestral coitus has been exhausted.

When it is so exhausted, a greater proportion of cells in the germ-masses developed from the remnant retained by the last procreant larvæ are used up; individual growth and development proceed further than in the parent; some members of the last larval brood are metamorphosed into winged males, others into oviparous females; the ova are impregnated and oviposited, and thus provision is made for disseminating the individuals and for continuing the existence of the species over the severe famine-months of winter.

These phenomena, first observed, as I have said, by Bonnet, in the genus *Aphis*, were the first to which the thoughts of physiologists were bent to explain. But, being viewed in the light of a strange and anomalous exception, and at a period when the phenomena of embryonic development were not known, the earliest steps more especially, success could not be expected.

Reaumur eluded the difficulty of the fact which Bonnet had discovered, by affirming the Aphides to be androgynous. The vagina in the perfect oviparous females has appendages called spermatheca and colleterium; and Reaumur might have even appealed to the microscope in support of his idea, for he might have detected, by its aid, spermatozoa in the spermatheca. But this would not have proved the hermaphroditic structure; for the spermatheca receives the intromittent organ of the male, and retains the semen in store for the successive impregnation of the ova as they pass out; the ova at the same time being coated by the adhesive and protective matter of the colleterium. These appendages of the vagina are found in most oviparous insects; and the true male *Aphis* is as well known now as that of any other species of insect. Moreover, it is found, that the viviparous virgin larvæ of the *Aphides* have not got a trace of those appendages of the vagina, which Reaumur supposed to be male organs. They were not required in her mode of generation, and are not developed; the germ-cell already exists in her, with sufficient spermatic and plastic force for its development: no semen, therefore, was required to be retained, and there is no spermatheca; the embryonic development is completed *in utero*, and no secretion for the protective covering of ova was needed. The structures, therefore, which Reaumur, under a misconception of their nature, cited in order to solve the problem of the alleged virgin procreation, are present only in that perfect form of *Aphis* where no such phenomena are manifested.

Leon Dufour, whose extent of research and comparison of the generative organs of insects led him to a true appreciation of the nature and function of the appendages to the female organs of the oviparous

(a) "Lectures on the Comparative Anatomy and Physiology of the Invertebrate Animals." 8vo. 1843. Pp. 234.

Aphides, referred the phenomena of the generation of the larviparous *Aphides* to "spontaneous or equivocal generation." Now, if we consider what we actually learn from these words,—that the larvæ produced by the virgin Aphides are produced by "spontaneous" or equivocal generation,—it will seem to be little more than another mode of stating the fact. The condition or mode of the fact, the phenomena rendering it possible, are not explained by them; M. Leon Dufour, however, meant to record his belief in a hypothetical mode of generation, in which, as he expresses it, "the act of impregnation was in no degree concerned." Having detected the male Aphis, and well scrutinized the structure of its organs, having witnessed the coitus with the winged female, and carefully excluded the male in repeating the observations and experiments of Bonnet, M. Dufour satisfied himself, and affirmed, that impregnation had no share whatever in the phenomena of the development of the larval aphis in the body of another virgin larval aphis.

With regard to the hypothesis of spontaneous generation, the reasons which have led me to concur with most physiologists of the present day in rejecting it were fully given in a former Course of Lectures on the subject of Generation, nine years ago, and every exact observation and experiment subsequently recorded serve to render that hypothesis less tenable and more gratuitous.

Professor Morren, a comparatively recent and very exact observer of the anatomy and generative economy of the *Aphides*, retaining the hypothesis of spontaneous generation as it has been applied to the Entozoa, propounded, though not without reserve, a theory that the larval aphides were developed in the body of the virgin parent, like Entozoa, "by the individualisation of a previously organised tissue." Now here also is a phrase which, when the meaning of it is analysed, does little more than express the old facts in a new way. When a larval aphis is developed, a new individual exists; in other words, it has been "individualised;" and, as nothing can come out of nothing, it must have been by the individualisation of a previously existing something. The question to be solved is, what is that something, and what has happened to that something to make its individualisation under the form of a larval aphis possible and conceivable by us according to the known analogies of other embryonic developments or individualisations? That would be the explanation of which we are in quest,—an explanation going as far as that which we are able to give, for example, of the development of an ordinarily impregnated ovum; and, by the proved analogy of the essential condition of the development in the virgin aphis with that condition in the impregnated ovum, capable of having every advance of knowledge of the operation of such essential condition applied to it.

When, however, M. Morren affirms "que la génération se fait ici, comme chez quelques Entozoaires, par l'individualisation d'un tissu précédemment organisé," the objection immediately arises, that no one has ever seen a portion of mucous membrane, muscular fibre, or other organised tissue detach and transform itself into an entozoon: such a process is as gratuitously assumed, and as little in accordance with observed phenomena, as "spontaneous generation" in the abstract. In a former Course I objected, that "The fissiparous nucleated cells of the ovum, once metamorphosed into a tissue, can produce nothing higher, and nothing else save by their decay, which products are excreted; but the cells which retain their primitive state amidst the various tissues which the rest have constituted in building up the body of the new animal may, by virtue of their assimilative and fissiparous forces, lay the foundation for a new organism." I shall not, however, here pursue the argument, which is carried out in my published "Lectures on the Anatomy and Physiology of the Vertebrate animals."

The learned and ingenious authors of the deservedly popular "Introduction to Entomology" admit it to be "an incontestible fact that female Aphides have the faculty of giving birth to young ones without having had any intercourse with the other sex," and they suppose "that one conjunction of the sexes suffices for the impregnation of all the females that in a succession of generations spring from that union." They adduce, in order to show that such a supposition is not contradictory to the general course of nature in the production of animals, the case of the hive-bee, "in which a single intercourse with the male fertilizes all the eggs that are laid for the space of two years;" and the case of a common spider, showing "that the sperm preserves its vivifying powers unimpaired for a long period, indeed a longer period than is requisite for the impregnation of all the broods that a female Aphis can produce." But these instances do not touch the question how one of such a brood, insulated from all connexion, should give birth to others. Admitting that this phenomenon may depend on the inheritance of the impregnating principle transmitted from generation to generation, the problem for the natural philosopher to explain is, how this is brought about. The superaddition of the "spermatheca" to the vagina of the queen-bee, as of other oviparous insects, plainly accounts for the fact in the economy of that insect which Messrs. Kirby and Spence quote, according to the function of the part determined by the well-devised experiments of Hunter on the silk-moth. (On Bees, Philos. Trans. 1792, p. 175.) To say that one conjunction of the sexes suffices to impregnate the females of the successive generations of Aphides springing from that union, is little more than a statement of the fact; and it seems to have been so felt by the able entomologists cited, who conclude their remarks by confessing—"It is, however, one of the mysteries of the Creator that human intellect cannot fully penetrate." (a)

The completion of an embryonic or larval form by the development of an ovarian germ-cell, as in the Aphis, without the immediate reception of fresh spermatic force, has never been known to occur in any vertebrate animal.

The condition which renders this seemingly strange and mysterious generation of an embryo without precedent coitus possible, is the retention of a portion of the cells of the germ-mass unchanged. One sees such portion of the germ-mass taken into the semi-transparent body of the embryo Aphis, like the remnant of the yelk in the chick. I at first thought that it was about to be enclosed within the alimentary canal; but it is not so. As the embryo grows it assumes the position of the ovarium, and becomes connected with the filamentary extremities of the eight oviducts. Individual development is checked and arrested at the apterous larval condition. It is plain, therefore, that the essential condition of the development of another embryo in this larva is the retention of part of the progeny of the primary impregnated germ-cell.

What is really surprising in the phenomena of the Aphides is the potency of the mysterious virtue of the quintessential excretion, which sustaining so great a degree of subdivision, and of dilution with the material incorporated in the successive generation of cells, is nevertheless equal to the renewal and repetition of embryonic development through so many generations.

The generation of a larval Aphis may be repeated from seven to eleven times in as many successive virgin generations, without any more accession to the primary spermatic virtue of the retained cells than in the case of the successive development of polypes in the compound zoophyte, or the successive budding of the individual leaves in the equally compound plant: one might call the generation of the virgin aphides an "internal gemmation," but this phrase would not explain the conditions essential to the process, unless we previously knew those conditions in regard to ordinary or external gemmation.

At length, however, the last apterous or larval Aphis, so developed, proceeds to be "metamorphosed," as it is termed, into a winged individual, in which only the fertilising filaments are formed, as in the case of the stamens of the plant; another larval Aphis perfects the generative organs, and develops the ovules, as in the case of the pistil. We have, in fact, at length "male and female individuals," preceded by procreative individuals of a lower or arrested grade of organisation, analogous to the gemmiparous polypes of the zoophyte and the leaves of the plant.

I have described the process for its better intelligibility in the Aphides as one of a simple succession of single individuals, but it is much more marvellous in nature. The first-formed larva of early spring procreates not one but eight larvæ like itself in successive broods, and each of these larvæ repeats the process; and it may be again repeated in the same geometrical ratio until a number which figures only can indicate and language almost fails to express, is the result. The Aphides generated from virgin-parents, by this process of internal gemmation, are as countless as the leaves of a tree, to which they are in some respects analogous.

It generally happens that the metamorphosis which I have described as occurring after the seventh or eleventh generation takes place much earlier in the case of some of the thousands of individuals so propagated: just as a leaf-bud near the root may develope a leaf-stem, a flower and seed-capsule, with much fewer antecedent generations of leaves from buds than have preceded the formation of the flower at the summit of the plant; or just as one of the lower and earlier formed digestive polypes may push out a bud to be transformed into an ovarian sac and a generative medusa. The analogy is beautifully and closely maintained throughout.

The wingless larval aphides are not very locomotive; they might have been attached to one another by continuity of integument, and each have been fixed to suck the juices from the part of the plant where it was brought forth. The stem of the rose might have been incrusted with a chain of such connected larvæ as we see the stem of a fucus incrusted with a chain of connected polypes, and only the last developed winged males and oviparous females might have been set free. The connecting medium might even have permitted a common current of nutriment contributed to by each individual to circulate through the whole compound body. But how little of anything essential to the animal would be affected by cutting through this hypothetical connecting and vascular integument and setting each individual free! If we perform this operation on the compound zoophyte, the detached polype may live and continue its gemmiparous reproduction. This is more certainly and constantly the result in detaching one of the monadiform individuals which assists in composing the seeming individual whole called "volvox globator;" and so, likewise, with the leaf-bud. And this liberation Nature has actually performed for us in the case of the Aphis, and she thereby plainly teaches us the true value or signification in morphology of the connecting links that remain to attach together the different gemmiparous individuals of the volvox, the zoophyte, and the plant.

The phenomena of parthenogenesis have not been manifested in any articulate animal of higher organisation than insects: they cease at a lower grade of the parallel series of the molluscous invertebrata. In some lepidopterous insects, which have been supposed to have the faculty of producing fertile eggs without sexual intercourse, closer observation has shown the mistake to have arisen from the unusual circumstances under which the act of impregnation takes place. This is the case with the moths of the genus *psyche*, which the German entomologists call "sac-träger" from the remarkable cases or sacs which the larvæ inhabit. The true state of the case has been explained by the observations of Von Scheven and Siebold. The females of these moths never acquire wings, but develope their ova under a grade of metamorphoses very little beyond that of the larval state.

The larvæ which become females fabricate an entirely different cocoon from that of the larvæ which become males, and the sexes of such larvæ are readily distinguishable by such cocoons. Von Scheven secluded one of these virgin female larvæ of the *Psyche vestila*, and found that she laid only barren eggs.

Certain female larvæ live quite separate from the males on special peculiar feeding-localities. When about to become pupæ, most of the cocoon-bearers leave those localities, and attach the mouth of the cocoon to branches of trees, to stones, or rocks.

Before becoming pupæ, the grub turns itself in the cocoon, and brings its head opposite the hinder or lower free opening of the cocoon.

The female pupæ manifest very little motion, but

(a) Introduction to Entomology, vol. iv .p. 161.

remain passive at the upper end of the sac, by which it is suspended; whilst the active male pupæ protrude their thorax from the lower opening of the cocoon shortly before emerging as the perfect moth.

The almost apodal maggot-shaped females cast their pupa-skin without quitting the cocoon; they wait, in the hinder or lower free end of the cocoon, the approach of the male, which accomplishes the act without ever seeing the female of his choice.

The male Psyche has not the penis of any remarkable length, but he is able to elongate considerably the abdomen; the skin of that part is soft and extensible; he inserts the abdomen into the hinder opening of the female cocoon, and brings the external genitals into connexion with the copulatory canal of the female. After the coitus, the female, which has no ovipositor, pushes herself back again into the cast pupa-skin, and there oviposits. Also, if such a female, awaiting the male, be disturbed at the closed end of the cocoon, she returns and betakes herself wholly within her old shed pupa-skin. In the allied genus *Talæporia*, the larviform females emerge from the hinder aperture of their short cocoon, and creep, by means of their well-developed legs, to the under side of the cocoon; the generative act being performed in open day. These females have a long ovipositor, and by means of it they fill their old pupa-skin with the impregnated ova. The procreant female of *Psyche* is maggot-shaped, has no fully-developed legs, no articulate antennæ, nor distinct eyes; neither has she a trace of an ovipositor; the last abdominal segment consists only of a short fleshy cylinder, on which a short oviduct opens. The colleterium is a double pyriform glandular sac, with a short common duct. A spermatheca communicates, by a short convoluted duct, with the common vagina, which has two lateral fleshy folds, and is connected with a round bursa copulatrix, with thin and delicate walls.

Such accessories to the flabelliform ovaria and short oviducts of the *Psyche* are of themselves sufficient to show that her ova are destined to be impregnated. The idea that the females of this genus of moth were parthenogenetic would, however, naturally arise from observation of insulated facts in the singular series of her generative processes. Our science ever presents a picture of truth evolving itself by slow degrees from the misapprehensions of observers. An entomologist collecting the female Psyche in her unusually early arrested stage of metamorphoses, and without cognizance of the singular mode of her impregnation, would at first conclude, from the analogy of other moths, that she was a virgin pupa; and, keeping her carefully insulated, would be astounded by her abundant production of fertile ova. Or, if ignorant of the peculiar place of her natural oviposition he might well mistake the shed pupa-case, filled with fertile eggs, for an actual pupa in which such eggs had been developed.

There are many striking and beautiful manifestations of instinctive prescience in the modes of oviposition, and in the location and attachment of the ova. Observe the actions of the common white butterfly. Its food is the nectar of flowers; but, after impregnation, she flits about with a purpose quite distinct from anything connected with the act of supplying herself with food; but, if the plant suitable for the food of the larvæ to be developed from her eggs happen to be within the range of her flight, it will soon be seen what her object is. The larvæ of most *Lepidoptera* infest, and can only be nourished properly by, the leaves of particular plants: thus, the mulberry is suitable to the silk-worm, and the cabbage to the *Pieris brassicæ;* when that commonest of our butterflies has found the cabbage, she has attained the end of her quest, and proceeds to the work of oviposition. But a more striking illustration is found in the ichneumon-fly, which is remarkable for the great length of the anal appendages. Her food, also, is nectar; but her chief occupation in crossing over the leaves of trees and plants, after being impregnated, is to discover the larvæ that may be lurking in the bend of the folded leaf, preparatory to its change into the pupa-state. The ichneumon, by means of her peculiarly long, sharp, and slender ovipositor, pierces the skin of the larva, and, in spite of their writhing, and the ejection of an acrid fluid, she succeeds in perforating that skin, and, then, by divaricating two parts of the sheath of the ovipositor, makes a little canal by which the ova are transmitted and lodged under the skin; she then flies off to seek another. Sometimes the female ichneumon, when she has found a larva, seems to take no notice of it; and, in that case, it has been found that another ichneumon has previously oviposited there, and, by some peculiar sense, she ascertains that there is no room for more ova, or not food enough for such when hatched. After the ichneumon has deposited the ova, she plasters over the wound with the colleterial secretion. In the insects of the genus *Cynips*, which are nearly allied to the ichneumons, the female has an ovipositor very similarly modified; its place for oviposition is the leaf of the willow; and the ova excite an action in the cellular tissue of the leaf, which results in the formation of a warm and nutritious bed for the larvæ. The products called "nut-galls" result from a similar procedure of the *Cynips Querci*. In an insect allied to *Aphis*, the *Chermes*, or *Psylla abietis*, the last act of the oviparous female, at the close of summer, is, to deposit her ova in the rudimentary leaves of the fir-tree, when these leaves, instead of growing to the length of the others, become thickened, and are converted, by the irritation of the ova of the Chermes, into a series of cells of a compact structure. In this specimen (showing No. 2972) a section has been removed, showing the cavities containing the larvæ. Here (showing No. 2975) is a specimen of the article in the old *Materia Medica*, called "Bedeguar." It is a twig of the common wild rose, from the end of which a tuft of mossy fibres has shot out, in consequence of the irritation induced by the presence of the ova and larvæ of the *Cynips Rosæ*. Hunter has made a section of this monstrous growth, exposing several of the nidamental cavities and their small white larvæ.

In the gad-fly (*Æstus bovis*) the ovipositor is like a telescope, terminated by boring instruments; by means of these the integument of the ox is perforated, and the egg is then deposited underneath the skin; a peculiar kind of inflammation is set up, followed by hypertrophy and condensation of the cellular tissue, and in the nidus thus produced the larvæ are developed. In the Bott-æstrus (*Gasterophilus equi*) the ova are destined to be incubated in the alimentary canal of the horse; and one might wonder how their passage could be insured into such a locality. The instinct of the female impels her to attach the ova to the hair of those parts of the body which is most readily reached by the horse's tongue; the irritation of the attached ova excites the action, and so they are licked off and swallowed. Many insects deposit their eggs in the earth, and the females of such are provided with instruments for digging. (A preparation of a locust was exhibited, showing the peculiarly modified shape of the ovipositor.) It consists of two elongated valves; these, in close juxta-position, are thrust into the earth, like the gardener's dibble; the valves are then separated by muscles, and the eggs are protruded along the outer space and deposited like a seed in the ground. The analogous part in the bee is that which forms the sting, which, as the defensive instrument of the nursing female, has a certain relation to the well-being of the young. Many insects not only provide the germ with the nutritive vitelline mass, or the material for the first development of the embryo, (if, indeed, the parent can be said to be concerned in that supply which is the result rather of a series of spontaneous fissions with an inherent power of assimilation of the primitive germ-cell itself,) but, in some cases, the parent having selected a fit place for the deposition of her precious burthen, continues the maternal office by placing near the ovum the kind of food which the larva will necessarily require in order to complete its growth.

Some insects, as bees and ants, feed the larva; supply them with the required food from time to time, as nurses satisfy the cravings of a child; but these cares rarely devolve upon the mother in the insect class: they are performed by a distinct race of individuals, of the feminine sex, but incapable themselves of exercising the procreative faculty.

The forms of the eggs of insects are very variable; often beautiful and regular, like the seeds of plants; sometimes very singular; always perfectly adapted to the required conditions for the development of the future insect. The eggs are cylindrical in *Bombyx everia;* conical, with tuberculate ribs, in *Pontia napi;* hemispherical in *Bombyx dumeti;* lenticular in *Noctua psi;* cup-shaped in *Orgyia antiqua;* flask-shaped in *Culex pipiens;* petiolate in *Hemerobius perla;* provided with diverging processes like ears in *Scatophaga putris*, to prevent their sinking too deep in the soft dung; provided with a special adaptation for floating in some aquatic insects; with numerous other modifications.

When impregnation has taken place, the germ-yelk becomes condensed, as in the Ascaris, receding a little from the vitelline membrane at its poles. The usual processes of subdivision take place, but in so much greater a degree at the peripheral layer that the subdivided vitelline mass becomes invested by a stratum of minute and nucleated cells. Kolliker, who has observed these early stages of insect development in the *Chironomus tricinctus* Schrank, gives the following account of the process. The primordial cells, at first round, and provided with one nucleolus, become afterwards elliptical, and generally two nucleoli can be discerned in them; afterwards two cells exist, of smaller size than the parent cell. He concludes, that this fissiparous generation of cells, which accords with that observed by Siebold and Bagge in the Ascaris, is the general mode of their multiplication:—"Hæc omnia, etsi nunquam cellulas in aliis inclusas offendi, ne ad sententiam adducunt, posteriores a prioribus gigni, ita semper binæ in unaque cellula matre oriantur." (a)

The vitelline mass becomes elongated and vermiform, and, by further subdivision and coalescence of the peripheric stratum of the derivative germ-cells ("cambium" of Herold), a small transparent integument is formed, like that in the Entozoon, first along the ventral aspect, then ascending up the sides to the dorsal aspect, which is likewise closed in by the reciprocally approximating folds which cover first the cephalic and then the caudal segments. The portion of the germ-mass remains long unchanged in the anal segment of the larva of the bee. No part of the yolk can be properly said to enter or be taken into the body of an insect. It never was out of the body: it is a "germ-yolk;" and forms the basis of the future body: there is no appended or superadded vitellus, as in the shark or bird. The division of the integument into the thirteen segments commences at the ventral aspect, which is convex, the vermiform body of the embryo being, at first, bent upon the back.

In the capitate larvæ the entozoal type is quickly left by the cervical constriction, and the development of a distinct head, which commences by the formation of the part afterwards retained as the labrum. The mandibulæ and antennæ next appear behind the labrum as convex lobes; and the part of the head in the lower interspace of the mandibles forms the labium. The maxillæ next bud forth between the labium and the mandibles, and the median fissure, surrounded by the rudimental trophi, sinks deeper into the substance of the head, and, meeting a slender anterior production of the internal vitelline sac or cavity, establishes the mouth and œsophagus. Whilst these stages are in progress, the peripheral series of included vitelline cells have undergone a series of spontaneous fissions; whereby the remaining mass becomes included within a second stratum or cambium, which, by coalescence and further metamorphoses of the cells, is transformed into the tunics of the alimentary canal, the interspace between which and the outer integument forms the abdominal cavity. A certain proportion of the vitellus, not included in the ellipsoid alimentary canal, has undergone transformations, by which the foundations of the muscular system, the ventral nervous chord, and the dorsal vessel, are laid. An attenuated posterior prolongation of the ellipsoid vitelline or alimentary sac forms the rectum, and opens upon the thirteenth segment, while it is bent upon the dorsal aspect.

In such a condition, but without the cephalic and trophal development, the entoziform of the flesh-fly is born or excluded from the parent: in a similar

(a) Observationes de prima Insectorum Genesi 4to. Turici. 1842.

condition the larva of the bee and of the parasitic Hymenoptera quits the vermiform ovum, but without the external communication with the digestive or vitelline sac having been established at the posterior extremity.

In some Coleoptera development proceeds to the formation of the appendages of the head. as above described, and a capitate but apodal larva is excluded, as in the nut-weevil.

In the other Coleoptera, as the *Donaciæ* (a), the ventral arcs of the second, third, and fourth segments, send out bulbous rudiments of the thoracic legs, before the tergal or notal elements of the segments are completed; the abdomen is closed above, whilst the development of the extremities has proceeded to the formation of obscure joints and terminal hooks. The rudimental palpi begin to bud from the maxillæ and labium; the mandibles acquire their hard terminal hooks, and closely resemble the thoracic feet. In this state the larva is excluded.

At an earlier period the simple bulbous antennæ, mandibles, and maxillæ, indicate three cephalic segments, equal in size and distinctness to those of the thorax. The labrum and labium might perhaps be regarded as indicative of two other abortive segments; but with this concession not more than five cephalic segments can be defined by observation of the early development of the insect. The biliary and other tubular glands result from juxtaposition in a linear series of derivative nucleated germ-cells, which coalesce by liquefaction of the parts of the cell-wall in contact with each other, the nuclei remaining longer and indicating the primitive separation of the cells. The ovarian tubes have appeared to me, in the larva of the silkworm, to retain the primitive series of nuclei of the germ-cells at their capillary beginnings; whilst coalescence of the germ-cells themselves, has taken place to form the lower part of the tube: such persistent, primitive, nuclei, or granules, seem to form the basis for the formation of the subsequent ova.

(a) Kolliker, loc. cit. p. 15.

LECTURES
ON
CLINICAL MEDICINE.

DELIVERED AT UNIVERSITY COLLEGE HOSPITAL.

By E. A. PARKES, M.D., Lond.:

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LECTURE IV.

Signs of Aortic Regurgitation—Possible Fallacies, Exceptions, and occasional Difficulties.

GENTLEMEN,—In the cases of valvular disease brought to your notice in the two first Lectures, I selected examples illustrating, more or less perfectly, lesions of the auriculo-ventricular openings and valves, and the antecedent or consecutive changes in the cavities and walls of the heart. In the third Lecture, we discussed a well-marked example of that disease of the aortic valves in which the flow of blood passing from the heart is impeded. In this case, we had also some amount of insufficiency of the aortic flaps; but, as this lesion was only secondary, and was not very complete, its signs were not brought out in a form of sufficient simplicity to enable me to bring before you the characteristic marks of regurgitant aortic disease. A case we have now in the wards, illustrates this affection remarkably well, and its discussion will also lead us to a brief general consideration of diastolic murmurs at the base.

The case referred to is that of Thomas North, aged 50, admitted for phthisis. We need not occupy ourselves at present with the particulars of the disease which sent him to us. It may be simply mentioned, that there is a large cavity, apparently well coated over with a fibrous cap at the left apex, unsoftened scattered tubercles at the right apex, and ulceration of the larynx: there is no appreciable abdominal disease at present. The symptoms of phthisis commenced a year ago; for a much longer time than this, however, the patient has suffered from palpitation; he has never had rheumatism, and we can discover no cause for the cardiac disease under which he labours.

Leaving out of view, for the present, all the symptoms unconnected with our present inquiry, the signs of the cardiac disease are as follow:—

The patient has, first, a slightly enlarged heart; this is proved by three signs, viz.: a moderately strong impulse, combined with a little increased lateral dulness on percussion, and slight lowering of the apex of the heart. Thus, the heart's apex is beating at the sixth rib, 2¾ inches below the nipple, and ¾ inch inside, instead of between the fifth and sixth ribs, and 2 inches below the nipple. This slight lowering would not, however, have been considered as abnormal, without the presence of the other signs, viz., a stronger impulse than is natural, and increased precordial dulness. The dulness extends laterally from a little inside the left edge of the sternum to outside the left nipple, and measures 3¼ inches; superiorly it rises to just above the fourth rib; the oblique and vertical diameters each measure 3⅜ inches. Supposing that the *direction* of the heart's axis is unchanged by liquid or gaseous pleural effusion, by emphysema, by abdominal tumours, ascites, &c., these three signs, when they occur together, are nearly absolutely certain. In increased precordial dulness from fluid in the pericardium, the dulness is more upwards than laterally, the impulse is rather weakened than strengthened, (unless there be pre-existent hypertrophy, when other things must be considered,) and the heart's apex remains at the normal point, or is even somewhat raised. If there be dilatation simply, the impulse is weak, and the apex seldom lowered. But, if there be any displacement of the heart, any tendency to a vertical or horizontal direction of its axis, as in the diseases of the lungs and abdominal organs just referred to, then the three signs I have now mentioned are liable to fallacy.

In the case before us, it is evident, also, that the slight enlargement, indicated by the above signs, affects chiefly the left ventricle. This is proved, 1st, by the extension of the dulness to the left, and not to the right, and by the strongest impulse being at the left apex; 2nd, by the fact, that there is disease of the orifices of the left, and not of the right heart. Sometimes, in enormous hypertrophy of the right ventricle, the extension of dulness and of impulse are to the left as well as, or instead of, to the right; but, in such cases, we have always other signs derived from such extreme hypertrophy, and from its invariable accompanying valvular diseases. Also, in order that increased impulse at the left nipple shall be attributed to left hypertrophy, and increased impulse at the sternum to right hypertrophy, there must be no displacement or change of axis.

When the heart is acting quietly, the impulse is almost entirely confined to the apex; when the heart acts strongly, the impulse can be seen and felt all over the cardiac region; it is not undulatory, and is unaccompanied by thrill. We cannot very well decide whether the muscular tissue of the heart is healthy or not. We can at all times only infer this from the nature of the impulse, the character of the sounds, or the general history of the case. Murmurs to which we must immediately allude, and which are dependent on valvular lesions, destroy the possibility of judging from the nature of the tone, as to the degree of hypertrophy and dilatation. I may mention here, that the objection which has been made to Laennec's opinions regarding the muffled tone of the first sound in hypertrophy, and the clear note in dilatation, by Skoda, viz., that the rule by no means invariably applies, may possibly be justified by the knowledge we are, at present, acquiring respecting the fatty degeneration of the heart. Pure hypertrophy, and thickening of the ventricular walls by fat deposition, external to the sarcolemma with which fat deposition in the sarcolemma is sometimes combined, are, in all probability, attended by appreciable differences in the character of the first sound, and cannot be included in the same rule, yet both are, at present, designated by the term hypertrophy. Another difficulty in judging of hypertrophy from the nature of the sounds is, that valvular lesions are often present, producing murmurs.

Passing from the cavities and the muscular substance to the orifices, we have the following physical signs presented by the case before us:—At the apex is a blowing murmur with the impulse, which has its maximum either at the apex or immediately outside; it is heard for some distance both inside and outside the apex; and in the former direction reaches to the right of the sternum, and even very faintly to the right nipple. The intensity of the second sound at the apex is exactly the reverse of this; at the point where the systolic murmur is loudest, the second sound is extremely faint; it is, however, distinctly heard, and is not covered by the murmur. From this point, towards the sternum, it gradually increases in intensity, and at the right of the sternum is sharp and accentuated. In fact, it is as if from this point of maximum development, the second sound were transmitted towards the left apex. This is a point I wish you to notice, as we shall have soon to allude to it again. The systolic murmur is not transmitted upwards so well as it is laterally; traced upwards it becomes gradually fainter, and is at last lost at the fourth left cartilage. It is referrible to regurgitant disease of the mitral valve, which is, no doubt, of old date, probably anterior to the pulmonary tubercles. Although it has co-existed with tubercles, it does not seem to have much increased the tendency to hæmoptysis, as there has been no spitting of blood for six months, and only a moderate amount before that time. From this fact, and, perhaps, from the soft character of the murmur, we may consider the mitral disease as moderate only.

When from the apex we proceed upwards, we find that almost immediately we commence to hear a very distant diastolic sound; this increases in intensity until, at a point equi-distant between the left nipple and the sternum, it is very loud and rough; at this point it cannot be positively affirmed that there is any systolic murmur; above this, at the third left interspace and cartilage, and at mid-sternum, the diastolic murmur is at its maximum; above this it diminishes gradually in intensity, but can be still heard loudly under the first bone of the sternum and to its right, and much more faintly to its left. In fact, in some of the reports, the second sound at the second left cartilage is noted as sharp, without murmur. At the third left cartilage a very soft systolic murmur can be heard, and above this point is audible, both to right and left of the sternum, and under it. It is much softer than the mitral murmur. In the neck there are loud arterial murmurs with the impulse; but no second sound or murmur. The systolic murmur, no doubt, indicates aortic obstruction.

The diastolic murmur presents several points for consideration, 1°. Its maximum is at the lower margin, or a little to the right of the lower margin of the third left cartilage, or just below this, and it is almost as loud at the fourth left cartilage. The aortic valve is rather deeply under the sternum to the right of and rather below the third left cartilage, or occasionally, especially in enlarged hearts, a little lower than this; therefore the maximum intensity of the murmur is immediately over the valve, or just below it. 2°. The transmission of the murmur is downwards towards the left apex for a considerable distance; in fact, almost to the apex, and upwards along the right border of the sternum; the murmur is often not heard at all at the second left cartilage, where we get, when the heart is acting quietly, only the sharp second of the pulmonary valves. 3°. The time of its occurrence is immediately after the systolic sound, and it continues nearly throughout the interval of rest; there is, however, a very short pause before the first sound re-commences. 4°. Its note is pitched lower than that of the systolic sound; it is rough, and the roughness is, perhaps, most marked at its commencement.

I need scarcely say, that the point of origin of this murmur, and its mode of transmission upwards, imply its production at the aortic orifice, while the time of its appearance proves its dependence on insufficiency of the aortic valve. Its transmission downwards would also prove its connexion with the left heart; it is transmitted downwards and to the left, viz., in the course of a line drawn from the centre of the third left cartilage to the place where the apex is seen. It is soon lost in a vertical direction along the edge of the sternum.

This diagnosis of aortic insufficiency is fully confirmed by the presence of certain signs derived from the arteries, particularly those of the neck and the upper extremities. Our patient presents, in a high degree, the phenomena of the vibratile or locomotive pulse. In the carotids, in the subclavian, axillary, brachial, radial, and, in a less degree, in the femoral arteries, the vessels are seen to be pulsating violently. Place the finger upon any of them, and you have in perfection the jerking, thrilling pulse, so well described by Corrigan. The artery one moment seems suddenly filled: the next moment it collapses as if as suddenly emptied. It is quite a different pulse from those cases, as in anœmia, great debility, &c., in which a thrilling, or slightly jerking character is given by the rapid passage of an undulation or wave; in aortic regurgitation the wave does not seem to pass by the finger, but when at its maximum suddenly to stop and recede. In fact, I need hardly mention, that blood does literally recede into the left ventricle through the patent aortic orifice.

This kind of pulse taken in connexion with a diastolic murmur having its maximum over the third left cartilage or at midsternum, is an absolutely certain indication of aortic insufficiency. In regurgitation from the aorta into a ventricle or the pulmonary artery, the diastolic sound is heard best higher than the valves. But, either sign may separately occur without such insufficiency, and there may be insufficiency without the jerking pulse, and even without the diastolic murmur. It may not be useless to allude briefly to examples of these facts. Thus, the jerking locomotive pulse occurs in arteries which have become tortuous, as is often the case with the brachial and radial. This is even evidenced in the present case; here the right brachial is moderately tortuous; the left is quite straight; the right is pulsating strongly; the pulsation of the left is only just visible; if the arm is bent, the pulsations in both brachials are much augmented, being still most marked in the right, therefore, if an artery is not well stretched between its points of attachments, its pulsation seems to become more visible. Again, occasionally in great hypertrophy, without any aortic disease, there is sometimes visible pulsation. In anœmia also the arteries are occasionally slightly moveable. Also, sometimes, in the most healthy persons, the arteries at the wrist can be seen visibly to beat. In all these cases the pulsation is, however, slight, and very different, in many respects, from the extreme example we have to-day referred to.

On the other hand, there may be a diastolic murmur at the base without aortic insufficiency. This may arise from aortic aneurism, in which case the maximum of the sound is generally above the aortic valve; or it may arise, in some very rare cases, from causes which are at present unknown. Cases are sometimes seen in which there is a diastolic murmur at the base, without any sufficient evidence of the existence either of aneurism, or of aortic insufficiency. In these cases the sound seems to arise in the aorta, and sometimes can be heard some way along it.

As visible arterial pulsations may be present without aortic insufficiency, so aortic insufficiency may exist without visible pulsation. This seems to happen under three circumstances:—1st. When the insufficiency is very slight. 2nd. According to Hope, when there is free mitral regurgitation, or great mitral contraction. 3. When the quantity of blood is in any way diminished, and the heart's action is feeble, as in chronic exhausting diseases; here also, generally the diastolic sound is indistinct or even wanting, and then there is no physical sign of aortic regurgitation.

With regard to mitral regurgitation and contraction, Dr. Hope referred the non-appearance of pulsation to the blood being so much impeded or forced so freely through the mitral orifice, that enough did not get into the aorta to distend it fully. There are some difficulties in this explanation, and we may accept the observed fact, without attempting at present to interpret it.

Returning from this digression to the case before us, we have diagnosed slight eccentric hypertrophy of the left ventricle, mitral regurgitation, aortic obstruction (slight), and aortic regurgitation (extreme). There are yet some circumstances connected with this case to which I must allude. From the extreme pulsation of the arteries, and from the marked character of the diastolic sound, we have considered the aortic regurgitation to be very great. Of course no normal second sound can be derived from such a valve. Yet there is a very marked second sound at the lower end of the sternum carried faintly to the left apex. Now, this is, doubtless, attributable to the pulmonary valvules which, at the second left cartilage, can be heard producing even sharply their normal sound. This is proved by the point where it is heard loudest, viz., over the pulmonary valves, by the direction in which the sound is carried, and by the existence of the aortic disease. In this case, as in many others, we have, it appears to me, a decided proof that both aortic and pulmonary valves produce a second sound, that one sound may be arrested, the other continue, and by being transmitted from its point of maximum development, may, as it were, supply, in auscultation, the place of the other. Here, at the left apex, there appears no doubt that the faint second sound is from the pulmonary artery. This audibleness of the pulmonary second sound at the left apex, the aortic second sound being destroyed by disease, is interesting by reason of its probable connexion with a phenomenon we must hereafter more fully consider, viz., the occurrence of double second sounds at the apex. You are aware, that, at the base, a phenomenon not uncommonly occurs, which has been termed reduplication of the second sound. Instead of the normal tic-tac, we have tic-tac-tac. This has been attributed, for a long time, to a non-synchronism between the falls of the aortic and pulmonary valves. To use the apt phrase of Skoda, the second sound becomes "cleft." At the apex a double second sound is sometimes heard, and has been attributed to various causes, such as a rub during diastole of the heart on the pericardium, or of the pericardium on the thoracic walls, to some disease of the mitral valve, &c. These causes may really be acting sometimes, but also, if the pulmonary second is thus so easily heard at the left apex, there is no reason why the double second sound at the apex should not be referred in some cases, as at the base, to a want of synchronism in the play of the semilunar valves. We ought then to have, in such cases, a re-duplication also at the base, but I do not know whether this is always the case, as I have myself very few and imperfect cases of reduplication at the apex, and have found no decided observations respecting the sounds at the base, in the recorded cases I have noticed. In two of my own cases, the reduplication *was* noticed both at base and apex.

The extension, or the non-extension of a moiety of the second sound, (if I may use such a phrase,) the other moiety being abolished by disease, may explain in part the discrepancies to be found in recorded cases as to the presence or absence of a second sound at the apex, in cases of mitral or aortic disease. The general rule seems to be, that in mitral insufficiency the second sound at the apex is not lost, though it may sometimes be obscured by a long rumbling systolic murmur; while in aortic insufficiency, the second sound at the left apex is very faint or wanting. When, therefore, a second sound is heard at the left apex in great aortic insufficiency, may it not be simply derived from the pulmonary valves? The exceptions to the rule are at present too numerous to allow us to give it much diagnostic value. Thus Skoda refers to a case of aortic insufficiency, in which the second sound was louder at the apex than elsewhere, so that we can hardly refer it in this case to the pulmonary valves; and it is a matter of pretty frequent observation to find in simple mitral regurgitation an occasional loss of the second sound at the left apex.

Another point connected with the case is the fact, that the pulmonary second sound is slightly sharpened, agreeing herein with the rule of Skoda, that accentuation of this sound corresponds with mitral regurgitation; indeed, such importance does Skoda attach to this sign, that it is almost necessary for the diagnosis of mitral regurgitation. I may remark, that this statement of Skoda must, I should think, be received with the reservation, that in the most healthy persons the second sound at the second left cartilage is occasionally very much accentuated.

Let me now sum up the very marked signs of aortic insufficiency, which this case has given us; from it we must form a standard to which all other cases are to be referred. Deviations may occur from this standard, but never without appreciable cause, which is to be found either in the circumstances already mentioned, or in others which we must hereafter consider. In this man, then, we have a murmur at the base of the heart, having its maximum over a line drawn from the third left cartilage through the sternum, or immediately below this line; occurring at once after the systolic sound, and abolishing, at the point named, the true second altogether, not, as it were, growing out of it. From this point, the diastolic murmur is transmitted upwards in the course of the aorta, downwards towards the left apex. At the apex of the left ventricle the aortic second sound is wanting, since we have seen reason to believe that the faint second sound heard here is from the pulmonary artery. In fact, was there not some mitral regurgitation, and consequent increase and accentuation of the pulmonary second sound, we might have here had an exemplification of the usual rule, viz., that there is loss of the second sound at the left apex in great aortic insufficiency. In addition to this diastolic murmur over the aortic valve, the patient presents locomotive and visible pulsation in arteries removed from the heart. He presents, also, the signs of the all but invariable sequence of aortic insufficiency, dilated hypertrophy of the left ventricle, and the frequent sequence of this condition, viz., mitral insufficiency. Another condition, which is often, but by no means an invariable accompaniment of great aortic insufficiency is present here, viz., a soft, low, systolic murmur at the base, caused, doubtless, by impediment to the outflow of blood, from the diseased valves. This is more common in bad cases than a harsh systolic murmur, or an absence of all sound with the systole, which signs are also occasionally coincident with aortic insufficiency.

You will perceive, that in laying down these precise rules, I am following those observers who believe that a very high degree of accuracy can be attained to in the diagnosis of diseased cardiac orifices. I am a firm partizan of this opinion, with the proviso, that the signs shall be accurately noted, and all the conditions of the given rules fulfilled.

Before passing from this case, let me ask you to observe, that the general symptoms are not severe. Considering the amount of lung-disease, the dyspnœa is trifling; the palpitation is not great; there is no dropsy or sign of obstruction in the general circulation; for the hypertrophied left ventricle still throws its current with sufficient force to prevent venous stagnation. Could we remove the phthisis, this man would go on many years yet with that heart, provided the nutrition of the muscular tissue was well preserved; in fact, aortic regurgitation is, after aortic obstruction, the least serious valvular disease of the heart *per se:* it is formidable, however, by its consequences, for it induces, almost invariably, hypertrophy of the left ventricle, and subsequently mitral regurgitation; then slowly the lungs and the right heart become implicated, and each specific lesion complicating itself with disorders which are secondary or primary to it, impresses upon them a pernicious influence, which necessarily reverts upon itself. Aortic insufficiency becomes formidable, also, if the general health breaks down, and dilatation of the left ventricle occurs.

Let us now, however, leave this case, which we shall hereafter have to consider from another point of view, and allude to an instance of diastolic murmur at the base, in a patient who has just left the hospital.

The case I refer to is that of Harriett Hare, aged 21, a thin spare girl, who has never menstruated, and whose breasts and nipples are perfectly undeveloped. She was admitted in the beginning of December, on the 9th day of a mild attack of articular rheumatism, which came on after exposure to cold and wet. Five days after admission all rheumatic symptoms disappeared; and, though we kept her in the hospital till the end of December, this was merely to watch a cardiac affection which presented some difficulties. With the exception of slight rheumatic twinges for two days lately, this patient considered herself, from shortly after her admission,

in perfect health. On admission, and on discharge, she presented several cardiac physical signs, which may be thus briefly summed up:—A very weak impulse felt at the upper border of the 5th rib, 1¼ inches inside nipple, and ½ inch below, and a small and narrow præcordial dulness, in the absence of any lung affection, indicated a small and feeble acting heart. At the point where the apex was beating was an extremely faint systolic murmur, and a very sharp second sound. Passing transversely to sternum, the systolic murmur increased in intensity; the second preserved its sharpness. At the right of the sternum the first sound was normal. At the base was both a systolic and diastolic murmur; the last loudest, seeming, as it were, to arise out of a very sharp second sound, and to occupy the whole of the interval of rest, becoming, however, gradually fainter towards its close. The exact point of maximum development was at the junction of the first and second bones of sternum, and it was heard better to the left than the right of this bone. Below the junction, and at the third left interspace, it was not heard; at, and all over the cardiac region below, these points, was only a very sharp second. In the post-sternal hollow was a systolic murmur, increased, but not altogether developed by pressure; no diastolic, only a sharp second sound could be heard.

There was no anæmia; no jugular pulsation; no arterial pulsation, except very slightly in the post-sternal hollow and the carotids; no cyanosis; no œdema of any part; no palpitation or pain in the cardiac region; no irregularity of the heart's action; no pulmonary symptoms of any kind except very slight cough,—in fact, no positive symptoms which could be taken hold of, except one which I am about to mention. The maximum of the diastolic murmur was, we have already said, immediately beneath the sternum, at the junction of its first and second bones; and from this point it was hardly transmitted either upwards or downwards. Just at this point, on either side of the sternum, a little pulsation could be felt, and there was decidedly a little more dulness than above or below. At the top of the sternum the percussion note was perfectly normal.

The murmurs present in this case were no doubt organic. We had, then, two questions to ask ourselves; First, was the endocardial murmur recent and of rheumatic origin, or was it antecedent to the rheumatism, which had existed for eight days? Secondly, whether recent or old, what parts of the heart were affected?

In answer to the first question, we had two facts in favour of the rheumatic origin of the murmur; first, the frequency of endocardial murmur in rheumatism; second, the circumstance that there had been no previous attack of rheumatism to which the cardiac affection could be referred. On the other hand, we had some grounds for doubting the correctness of this view. The mere slightness of the joint affection signified nothing, as cardiac complication may come on in the least severe cases. But, 1st., the general symptoms were exceedingly slight; 2nd, the murmur at the apex could not be unequivocally referred to the mitral valve, as I shall presently mention, nor could the murmur at the base be unequivocally referred to the aortic valve; and yet murmurs arising in, and easily referred to, these structures, are the common murmurs heard in the recent endocardial complication of rheumatism; 3rd, the diastolic murmur at the base, if attributable to recent endocarditis, must have been indicative of aortic regurgitation, and this could hardly have been produced by eight days' disease without serious and distressing general symptoms; 4th, the murmurs did not have the peculiar timbre common to recent endocardial murmurs; but this argument, depending on a judgment of sense merely, was of little weight.

Altogether, the weight of the reasoning appeared to be against the supposition of recent disease, and this opinion was supported by the progress of the case; the girl was kept in the hospital twenty-three days, as long, in fact, as she would stay, and during that time, no more change occurred in the cardiac sounds than occurs in all cases, from variable activity of the heart's action.

Supposing, then, these murmurs to be old, they could not have been of rheumatic origin, since the patient had never had rheumatism before. To what, then, were they owing? Before answering this question, let us return to the second point we just now mooted, viz., as to where the murmurs were generated.

That the sound at the apex was produced by mitral insufficiency, seemed unlikely from its situation, which was inside the apex, and from the want of any symptoms of hypertrophy of the left ventricle, or of implication of the pulmonary circulation; that it was not derived from insufficiency of the tricuspid valve, seemed proved by the want of symptoms derived from the neck, or from the general circulation, and from the presence of a normal sound along the right of the sternum. The murmur could not, in fact, be easily referred to either orifice.

Again, the murmurs at the base were above the aortic valves; if the diastolic indicated regurgitation, it did not abolish the aortic second sound; it was transmitted too much to the left of the sternum, and was not attended with visible arterial pulsation. In fact, here also the symptoms did not square with the rigid diagnosis of aortic insufficiency which we have laid down.

The only positive symptoms we had, viz., the maximum of intensity being over the junction of the first and second bones of the sternum, and the slight pulsation felt here, were not sufficiently marked to allow any great stress to be laid upon them.

Coming, then, without more detail, to the diagnosis of this disease, I think it is clear that it would be imprudent to diagnose disease of either aortic or mitral valve. In fact, I would not, myself, in such a case, give any decided opinion either on the organic causes of the murmurs, or of the antecedents of these conditions. In practical medicine, it is better to make no diagnosis than to make a wrong one, or rather, it is better always to be aware to what extent our diagnosis is a certain one. There are, however, one or two points in the history of the case which enable us to make a suggestion as to the remote causes of the morbid sound. We had a patient who presented cardiac murmurs, which could not, without violation of the strict rules of diagnosis, be referred to the well-known lesions of these valves. These murmurs co-existed with a weak and small heart, and occurred in a person who presented many marks of incomplete development. Thus, although twenty-one years of age, country born and bred, and derived from healthy parents, she was very diminutively formed, only 4ft. 6 in. in height, without the least appearance of mammæ or nipples, and with no normal uterine action. Putting all these circumstances together, it may be thrown out as a possible case, whether there is not some congenital malformation of the heart, not enough to produce any of the more formidable effects of arrest of development, but merely the comparatively slight morbid signs we were able to note. But this is a mere conjecture. I have brought the case before you, only for the purpose of enabling us to discuss more fully this important subject of organic murmurs of the heart.

ORIGINAL CONTRIBUTIONS.

ON THE

TREATMENT OF ACUTE PERICARDITIS;

ESPECIALLY ON THE

EFFECTS OF BLOOD-LETTING AND MERCURY IN THAT DISEASE.

By JOHN TAYLOR, M.D.,

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(Concluded from page 75.)

The analysis, which I have now completed, of these cases, does not seem to me to sustain the general feeling of the Profession in favour of the curative powers of mercury in inflammation of the pericardium, and of serous membranes generally; but rather, I think, tends to produce a contrary impression. It becomes, therefore, an important question to determine upon what that feeling is based. Is the evidence so clear, and of such an amount, as we have a right to look for, when we regard the importance of the opinion, its decided character, and its general reception? I can do no more than very briefly discuss this question, but I am unwilling to pass it by without notice.

The prevailing opinion of the Profession has been better expressed by no one than by Dr. Latham. (a) His exposition is remarkable for its elegance, clearness, and precision, as far as the subject admits of precision; and I think I shall best accomplish the object I have in view, by offering a few brief comments upon the principal arguments adduced by him. I select Dr. Latham as the best representative of the opinions which he holds, and from no personal considerations, unless it be the high respect which I entertain for his authority and character.

I might refer to many passages in which Dr. Latham expresses his strong confidence in the antiphlogistic and reparatory powers of mercury in the cases in question. For brevity's sake, I will content myself with one. Speaking of the treatment of pericarditis, he says (Vol. I., p. 303):—"And, allowing bleeding and common antiphlogistic measures to be needful, and even indispensable, I am fully persuaded, that, let them do all which they can do, mercury can do something more; something towards saving life, and inducing reparation which nothing else can do so well. *Of this there is as satisfactory evidence as we have of most points in practical medicine which are thought settled.*"

Dr. Latham specifies certain conditions as aiding or insuring the efficacy of mercury. These are,—

First, the *form* of the inflammation. "The more it is adhesive, or has its tendency to the deposition of lymph, the more does it admit the curative impression of mercury."

Secondly, the *part* which it affects. "All experience bears testimony to its more general utility in inflammation of serous than of mucous membranes. In pleurisy, in peritonitis, we are accustomed to give mercury without much discrimination of the kind of inflammation we have to deal with, or whether its predominant tendency be to lymph, or serum, or pus, or blood; and success has attended the practice."

Thirdly, the state of the *constitution*. "The constitution which bears mercury the best, and most readily accepts and appropriates all the good it is capable of doing, is that which is naturally and habitually the most healthy and the most free from all specific taint or weakness, whether hereditary or acquired."....."The constitution which bears mercury the worst, and is most apt to convert the good it might do into evil, is that which is habitually unhealthy, and has acquired or inherited some specific taint or weakness, as scrofula."....."All remedies applied to it (inflammation in such a constitution) are of doubtful efficacy." (P. 262—4.)

But, may I not be allowed to ask, are not these precisely the inflammations and the circumstances in which inflammations get well, under any kind of treatment, and without any treatment at all? Is this not an exact description of the cases which I have placed in my *first class*, and which nearly all ended in recovery, as distinguished from those in my *second class, all* of which ended in death? Are they not, therefore, the cases from which it is the most difficult to extract precise information in support of any plan of treatment? The *danger* of idiopathic inflammation of serous membranes in a healthy subject has, probably, been much exaggerated,—if we except, for obvious reasons, inflammation within the skull, and that of the lining membrane of the vascular system. As this is a point of some importance, I will take the liberty of quoting one or two high authorities in support of the opinion which I have expressed.

M. Louis says, that "a fatal acute peritonitis, which was not secondary to some other disease, was a thing he had not seen for five or six years, and, perhaps, never."(b) Dr. Jackson, jun., writes as follows:—

"1. Pericarditis is called a *very* fatal disease. 2. Peritonitis the same. 3. Pleuritis often the same. 4. Gastritis the same. 5. Erysipelas the same. And

(a) Lectures on Subjects connected with Clinical Medicine, 1st Ed., 1845, Vol. I.

(b) "Memoir of James Jackson, jun., M.D." Boston, America. 1835. P. 168.

yet, in truth, M. Louis, for eight or ten years passed entirely in hospitals, making daily autopsies, has never, or almost never, seen any one of them by itself fatal, in a subject previously healthy. When I have heard him, from time to time, announce these *cases*, I have doubted; but, on reference to my note-book, and my memory of individual cases, I have found that my experience coincides with his. I have but once in my life seen either of these cases alone, in a healthy subject, fatal; a pleurisy in a child,—even here I am not *sure*."(a)

"Pleurisy, by itself, simple pleurisy, is scarcely ever fatal,—Louis says not more than one in a hundred,—*for of sixty-eight cases which he has seen within six years, not one died*."(b)

In the year 1841, I was present at a clinical Lecture, by M. Chomel, at the Hotel Dieu, in Paris, in which he enumerated all the cases of pleurisy that had occurred in his wards during the preceding six months; and stated that not one had proved fatal. He quoted, at the same time, with approbation, the opinion of Louis, which I have given above.

Dr. Latham adduces various *proofs* of the antiphlogistic powers of mercury. That which seems to have had the greatest weight with his own mind, is the *general impression* left upon it by his experience as a whole. "Thus, when I take my own experience in detail, and examine the results of treatment, case by case, I cannot pretend to have found a certain proof that mercury is an indispensable remedy to the cure of endocarditis; but, taking my experience in the mass, I still fear to omit its employment in any case of endocarditis with which I have to do."(c)

Dr. Latham admits that phrenitis, pneumonia, pleuritis, &c., have been cured by other means, and without mercury; he refers to the inference drawn by some in favour of blood-letting, and to the alleged want of proof of the power of mercury; and then adds,—"Well, as far as *the particular cases go*, I cannot venture to say that your inference is wrong. Still, my practice must be governed by the sum of my experience. And the sum of my experience is this,—that the acutest forms of these inflammations are arrested more surely and more speedily by bleeding and mercury conjointly, than by bleeding alone."(d) He admits, also, that he has "facts which claim an independent remedial power for blood-letting, and that he has "none which claim the same for mercury."(e)

This main branch of Dr. Latham's argument involves a question of medical philosophy, so important, and so intimately connected with my subject, that I cannot forbear to touch upon it,—I refer to the use of the numerical method, or to the application of medical statistics to the determination of questions in various branches of medicine, and especially of questions in therapeutics. Nothing that I can remember has surprised me so much, as the expressed opinion of some of the most eminent among English physicians, that what has been called the "numerical method," as expounded by M. Louis, is inapplicable to therapeutics. The truth of M. Louis' views upon this subject seems to me to have been placed beyond the possibility of a doubt; and it is this conviction alone, together with the adoption of those views by the most accurate of the French physicians, which altogether removes from my mind the hesitation which I should otherwise feel, in supporting opinions which have been condemned by men, for whose professional authority in general I feel the highest respect. Those who object to the "numerical method" in therapeutics, seem not to have reflected that, in fact, there is, and there can be, no other method. The choice is, not between the numerical method and something opposite to it; but between a more or a less imperfect numerical method. Let the question be to ascertain the value of any given remedy in any given disease. The appeal is made to experience. How is the result of this experience to be got at? Those who reject the numerical method proceed in this way. They endeavour to remember in how many cases they have given the remedy, and with what effect upon the mortality and duration of the disease, and the sufferings of the patient. If they be intelligent men they classify their cases in their minds, and endeavour to remember how far the result was modified by the age, strength, and previous health of the patient; the form and severity of the disease, and other circumstances, and then they record the result in the form of the *general impression* left upon their minds by this process. Now, what do the advocates of the numerical method do? Precisely the same thing, with this addition, that, instead of attempting to carry so many and such complex details, in their memories, they *count* their facts and state the result in figures. I cannot even *imagine* any possible ground upon which any man can hesitate to adopt the latter plan in preference to the former. What would be thought of an astronomer, or a chemist, or of a cultivator of any other branch of natural science, who should refuse to use the numerical method? The necessity of the numerical method rests, ultimately, upon *two* facts. The *first* is, that the *memory*, unaided by figures, is not *able*, in any instance, to retain all the details requisite for the solution of any but the simplest therapeutical question. The *second* fact is, that if the memory were ever so capacious, it is still liable to be *biassed*; so that by noting some things more than others, the former are made to appear more, and the latter less numerous, than they really are. Those things appear to be the most numerous which made the strongest impression. "The mind," says Laplace, "has its illusions, like the sense of sight; and, as the touch corrects the latter, so reflection and calculation correct the former. A degree of probability, founded upon daily experience, or exaggerated by fear and by hope, strikes us with more force than a higher degree of probability, which is only the simple result of calculation." . . . "Thus the philosopher of antiquity, to whom was shown, in a temple to exalt the power of the deity who was adored there, the *ex Votos* of all those who, after having invoked him, had been saved from shipwreck, made a remark conformable to the calculation of probabilities, in observing, that he did not see inscribed the names of those who, in spite of this invocation, had perished."(a) In no science more than in medicine, and in no branch of medicine so much as in therapeutics, is the mind exposed to this kind of bias. Some of the sources of it are open to every eye. The desire to verify a theory, to find a new remedy, to relieve suffering, to acquire money by establishing a reputation for successful treatment,—these are but a few of the sources of our prejudices; and the absence of a method of checking the errors to which they give rise, is the main reason why therapeutics is the least advanced branch of medicine, and why one fashionable remedy is perpetually being followed by another, which, in its turn, is forgotten, to the deep disgrace of our science, to the great injury of physicians, and to the public support of quackery in all its forms. There will be no end to the miserable uncertainties of therapeutics, —no rationally accurate answer given to nineteen-twentieths of all the questions which it embraces,—no refuge from the disgrace of our interminable differences of opinion, until our facts shall have been accumulated in large masses, and analyzed, not in a treacherous, or a partial memory, but in figures which, rightly employed, can neither perish nor deceive.

Let no man suppose that it is men of weak, or of dishonest minds only, who are not to be trusted without the check of figures. There is no man, be he ever so accurate, ever so upright, to whose opinion, unchecked by figures, I should feel justified in attaching any but the smallest importance, in any important question in therapeutics. I will close what I have desired to say upon this subject, by referring to one or two examples, which will prove my last position.

1. When the French surgeons published statistical returns of the results of various amputations performed in the Paris Hospitals, and showed in them that the mortality was very high, the opinion was entertained, pretty widely I believe, and was expressed by some, that the result of similar operations performed in this country was much more favourable. Dr. Fenwick observes: "It is a striking illustration of the necessity of accurate calculations, that we find a celebrated hospital surgeon supposing that only 1 out of 20 died after this operation; whereas the general result of British civil practice, in more than 2000 cases, shows an average mortality of 1 in 4; and how shall we reconcile the returns of military surgery with the boasted success of many of our military authors?"(a)

2. Laennec, one of the most accurate of men, boasted, that, by the use of tartar emetic in large doses, he had almost annihilated the mortality of pneumonia. The records of the Hospital have been examined,—his facts *counted*,—and the result is, that he has been found to have been not more successful than others, having lost two cases out of every five. These figures are given on the authority of my notes of a Clinical Lecture of M. Bouillaud, delivered in 1841.

3. Again, Laennec *states*, "that, if ulcerations of the trachea are sometimes met with in consumptive patients, it is much more common to meet with them in persons whose lungs are otherwise quite healthy."(b) Louis, on the contrary, has *proved*, by figures, that, in more than one-third of the bodies of persons dying of phthisis, ulcerations were found in the trachea; whereas, in upwards of 500 non-tuberculous subjects, carried off by chronic diseases, he did not meet with a single case of ulceration of the larynx or trachea.(c)

4. Louis—the most accurate writer, perhaps, in the history of Medicine—makes this remarkable statement respecting his own researches,—that when he came to a conclusion, from the simple *recollection* of facts which he had not analysed, he found, in every instance, after this analysis was made, that his previous conclusions were false.

I must guard myself, however, against being supposed to class Dr. Latham with those who oppose the numerical method. I am not aware that he does so: on the contrary, he has employed it, in the work I have referred to, more freely than most English physicians. It happens, however, that, in discussing the value of mercury, he has rested the main weight of his argument upon the *general impression* left upon his mind by the sum of his experience, rather than upon a numerical analysis of his cases. It is probable, indeed, that his cases did not admit of a fuller analysis than he has made, in relation to the question before us, from the fact, that, in all of them, mercury and bleeding were employed conjointly. Nevertheless, in the absence of such an analysis, founded upon cases admitting of it, it is impossible to accord any scientific value to the *general impression* left even upon his mind.

Another argument, in favour of mercury, employed by Dr. Latham, is drawn from a comparison of the results of French and English practice. M. Bouillaud's treatment is particularly referred to. His treatment is vigorously antiphlogistic, but without the use of mercury. In Dr. Latham's practice, and in English practice generally, both bleeding and mercury are employed. The result, in respect to *endocarditis*, Dr. Latham states as follows:—"Since the time that auscultation has disclosed the sure diagnosis of this disease, it has not, in a single instance, proved fatal under my care. But M. Bouillaud .... records numerous instances in which endocarditis terminated fatally under his management." "From this comparison the conclusion is irresistible, that mercury has the power of doing something more, in counteraction of inflammation of the endocardium, than venesection and other antiphlogistic remedies, and that, upon this something being done, the life of the patient often depends."(d)

Upon this comparison, I will only observe, with great respect for the Author, that, as in scientific questions, no opinion ought to be received upon authority, but only upon evidence, so, more details should be given before we can venture to assume, that Dr. Latham's treatment has been more successful than M. Bouillaud's. We ought to know more

(a) Op. cit. p. 169.
(b) Id. p. 118.
(c) Lectures, vol. i. p. 300.
(d) Id. p. 268-9.
(e) Id. p. 297.

(a) "Essai Philosophique sur le Calcul. des Probabilités."

(a) On the Amount and Causes of the Mortality of Amputations. Edinb. Monthly Journal, Oct., 1847. Quoted in Braithwaite's Retrospect, Vol. XVI., p. 189.
(b) Louis. Recherches sur la Phthisie, 2nd Edit., p. 58.
(c) Id., p. 51 and 55.
(d) Lectures, Vol. I., p. 300-1.

about the severity of the cases compared,—the ages and other circumstances of the patients. Endocarditis, in a mild form, is a very common, and, probably, a comparatively trifling disease; but, in its more severe forms, it assumes a different importance, and is capable of destroying life, as I can testify, in spite of both bleeding and salivation, ever so promptly and actively employed.

In respect to the treatment of pericarditis, Dr. Latham's statement is not less strong:—

"These, moreover, are the cases in which foreign and English practice, in the management of pericarditis, may be fairly brought into comparison, and in which it may be seen where and how *the one so often fails, and the other is so often successful.*"

"In foreign practice, no mercury is used from first to last, but all the power of common antiphlogistic remedies is brought to bear upon the disease; and thus its symptoms are mitigated and subdued: yet they return again and again, and are again and again mitigated or subdued. And so the patients are kept alive for a week or ten days, *and then they die, in the great majority of cases.*"

"In English practice, mercury is given from first to last. But it is for a long time as if it were not given at all, for it produces no sensible effect. Common antiphlogistic remedies, however, are able, again and again, to mitigate and subdue symptoms; and so, at the end of a week or ten days, the patients are still alive. Yet they are ready to die; but, in the great majority of cases, they do not die. Salivation arrives late, and seems to save them." (a)

I do not know where Dr. Latham finds the proof of the statement, that, under foreign treatment, the great majority of cases of pericarditis prove fatal. It is in direct opposition to the explicit statements of the most respectable French physicians themselves. Louis, (b) from the collection of a considerable number of cases, has calculated the mortality to be about 1 in 6. This is exactly the same as in Dr. Latham's own cases. I have already quoted a statement of M. Louis, that he had never seen pericarditis prove fatal when occurring in a subject previously enjoying good health.

Corvisart indeed states, that "acute and chronic pericarditis lead to a rapid or slow, but, almost always, to a certain death." But there is no longer any doubt that this great physician was mistaken, in consequence, very probably, of the imperfect means of diagnosis in his time.

Chomel—one of the most experienced French physicians, observes:—"Pericarditis is certainly a serious disease; nevertheless, the prognosis is less serious than it was formerly believed to be. Experience proves, in fact, that cases of simple pericarditis most commonly get well, whilst the complicated cases are often fatal." (c)

Bouillaud,—whose practice has been more especially referred to,—speaking of the results of his method of treatment, says:—"What I am able to affirm is this, that I have cured the greater number of cases of pericarditis that I have had occasion to meet with during some years past." (d) Again: "Pericarditis, we must repeat, is really a very serious and rapidly fatal disease, only in those cases in which it is complicated with carditis, with very intense endocarditis, or with violent pleuro-pneumonia. But then the principal danger arises more from the complication than from the pericarditis itself." (e) Nearly all the cases of pericarditis that I have met with, I have seen yield rapidly to free bloodletting, repeated several times, within the space of three, four, and five days." (f) He states, farther, that, of the 18 cases of acute pericarditis which he has reported in his work, 6 died, and 12 recovered. Of these 6, 3 were not treated according to his method, and 1 died of tetanus. Excluding these, there remain 14, 2 only of which died, and even these two were accompanied with very severe complications. He then concludes, "that *simple* acute pericarditis, if properly treated, (*i. e.*, by bleeding,) would hardly ever terminate fatally." (a) The results obtained by M. Bouillaud will appear to be more favourable, when it is remembered, that the cases reported are taken indiscriminately, no distinction being made between the patients who were previously in good or in bad health.

Dr. Latham considers "it is a great thing for the exocardial murmur to begin and cease in a week." He can refer to three cases only in which he is sure that such was the fact; and there was not one of them in which the patient was not first salivated. "Here mercury seemed to me to display its highest antiphlogistic power. But, if others doubt, let it be a question for future observation, whether, where the murmur of pericarditis rapidly ceases, and the danger rapidly disappears, and convalescence rapidly follows, salivation is or is not a preceding condition, in all, or in the vast majority of cases. There is no question of practical Medicine more important to have rightly settled." (b)

I hope that, ere long, we shall be furnished with the means of answering this important question unequivocally. In the mean time, a reference to the cases of M. Bouillaud, treated by bleeding and without mercury, will make it appear very probable that several of them may have begun and ended within the time specified by Dr. Latham. One of them, at least, seems distinctly to have done so. Among my own cases, there is not one in which the disease ran its course within a week, although, in several of them, very free bleeding and early salivation were conjoined in the treatment.

We are not, therefore, I think, in a position to assume, that we have obtained more successful results, by combining salivation with bleeding, than the French have obtained by bleeding without mercury. Some intelligent French physician might confer a great benefit upon science, by making a numerical analysis of a sufficient number of accurately reported cases of inflammation of serous membranes, treated by bleeding and other means, unaided by mercury; and by comparing the results of such treatment with those obtained in this country by mercury and bleeding combined. I need scarcely add, that it has formed no part of my object to defend the treatment of M. Bouillaud: on the contrary, my *general impression* is against bleeding to the extent to which he has carried it. But I cannot permit my general impression to have any weight, even with myself, in an examination of the real evidence, for or against any plan of treatment.

I had marked one or two other portions of Dr. Latham's argument for comment, but I have already noticed the things most material for my purpose. In the enumeration of his cases Dr. Latham has met with the same obstacle which I have found in mine, viz., that in them both bleeding and mercury were embloyed, and, therefore, it is the more difficult to determine the separate value of each.

In conclusion, I wish to guard myself against being supposed to advocate the disuse of mercury in the cases in question. If I were asked, whether salivation is useful in controlling or repairing inflammation of serous membranes and its consequences, I should answer, that its utility may possibly be great, but that it has not been proved to my satisfaction. As long, however, as the question admits of debate, I should not feel justified in advocating the disuse of mercury. In dealing with dangerous forms of disease, we are all anxious to use those measures, during the administration of which the disease has often been observed to terminate well; and we can seldom feel justified in omitting one or other of these means, for the purpose of being enabled to award its precise share of merit to each. This end is only to be attained by comparing the practice of physicians whose views, and consequent treatment, differ; and I think that most valuable information respecting the value of mercury, might be extracted from an adequate comparison of the treatment of French and English physicians, in inflammations of serous membranes generally.

Several other remedies were employed in some of the cases of pericarditis, but not with sufficient frequency, or in such circumstances as to furnish matter for more than a passing reference.

Blisters were applied in several cases over the region of the heart. There is no evidence to show that they did either good or harm.

Sinapisms.—In the only case in which this remedy was used (No. 20), it relieved pain.

Purging.—Free purging was produced in several cases, and, probably, co-operated with the bloodletting in its effects. The benefit of each cannot be separately distinguished. In several cases purging caused considerable depression.

Opium was of service in relieving spasmodic dyspnœa, in one case (20), and convulsive movements in another. It was also given with the calomel, in various cases, but the only effects specially noticed are those just stated.

Spontaneous Cure.—Several of the cases show that the disease may run its course, and probably terminate favourably, without any treatment. Cases 30 and 36 had terminated in universal adhesions. The disease had not been discovered, and therefore not treated. The patients died of other diseases. Case 18 was not treated for the first nine days, and then the measures employed were so trifling, that it is probable the course of the disease was very little modified by them.

(a) Lectures, Vol. I., p. 319-20.
(b) Memoire sur la Pericardite, p. 291.
(c) Dictionaire de Médicine. Art. Pericardite.
(d) Traité Clin. des Malad. du Cœur. Paris, 1835. Vol. I., p. 476.
(e) Id., p. 490.
(f) Id., p. 479.

(a) Id., p. 525-6.
(b) Lectures, Vol. I., p. 306-7.

HYPERTROPHY OF THE THYMUS GLAND, CAUSING LARYNGISMUS STRIDULUS AND DEATH.

By W. T. KEAL, M.D., Oakham, Rutland.

Mary Anne B was born healthy, and continued so for six months, with the exception of a protracted sore mouth, accompanied with occasional diarrhœa. She was then observed to be frequently seized with short catchings of the breath, with momentary suspension of respiration. These attacks came on frequently by night, as well as by day; at one period amounting to twelve or thirteen times during the night; producing sometimes only a flush of her face and slight perspiration about the head; at others, lasting until the whole countenance became livid. The pulse, it may be observed, was very variable in frequency and power.

The parents had lost a child in May, 1846, affected with the same disease, which probably arose from the same cause, although no *post-mortem* examination took place. The paroxysms in the former case were, however, more distressing, and the respiration during the same excessively croupy, so as to be recognized at some distance; the attacks also in that case were less frequent, but more formidable in character. There were no carpopedal contractions in either of the children. In the present case, a routine of mild antiphlogistic treatment was adopted, and during the paroxysms, dashings of cold water to the face were always resorted to. But no marked benefit resulted, with the exception of a less frequent recurrence, after the application of a small blister to the upper part of the sternum, which was once repeated.

The attacks, however, soon returned with their former frequency. As dentition was at the same time progressing, lancing the gums was repeatedly had recourse to, with the impression that it might in some degree remove a source of irritation; but the operation latterly brought on a seizure; it was, therefore, abandoned. The child was in good spirits, and took its food freely, yet seemed to be inconvenienced by exertion, or by being suddenly moved. She could not, after the commencement of the symptoms, lie on the nurse's lap resting on the abdomen whilst being washed, as is usually practised with infants. Stretching her hands above her head on first waking, or reaching her arms forward to take hold of anything, the nurse's hand at the time being pressed against the chest, brought on an attack. The voice was clear and the breathing easy, though rather quicker than natural. Notwithstanding the repeated attacks, the general health of the child continued good up to the time of the last seizure, which was on the 18th of May, at 4 p.m., when, without warning or perceptible change, the catching of the breath came on, and she died almost instantaneously, great lividity of the features immediately following.

Autopsy.—May 19, 8 a.m.—The body of the child healthy in appearance; the countenance placid;

the brain rather turgid, with dark blood; membranes healthy; there was no fluid in the ventricles, or at the base of the brain. On opening the chest, (removing the sternum and some portion of the ribs on each side, so as fully to expose all the viscera and cavity of the thorax,) the thymus gland was found to occupy a large space, covering the heart almost to its apex, and a great portion of the left lung. On its right edge it was thickened, and dipped down into the chest, so as to compress a part of the right lung. The gland seemed to compress the whole of the base of the heart and large vessels. On lifting its bottom edge the aorta was seen lying underneath, or perhaps it might be said within it, and seemed to have undergone some degree of dilatation which extended from the heart nearly to the arteria innominata. The aorta was empty, and its coats apparently healthy. The heart was healthy, and of normal size, but turgid with black blood, as were also the venæ cavæ; lungs healthy; the abdominal viscera the same; the edge of the thymus gland on the left side seemed almost to surround the aorta just where the arteria innominata is given off, and had the appearance of producing constriction there, giving rise, I presume, to the apparent dilatation of the aorta. The gland appeared to be normal in its structure, and weighed 630 grains. The immediate cause of death was asphyxia, but whether produced directly by the pressure of the enlarged gland upon the cava, interrupting the circulation, or by spasm of the glottis, induced by the pressure of the enlarged thymus upon the inferior laryngeal nerve, which ramifies over the aorta, may be a matter of doubt, though I am fully inclined to the latter supposition. A lucid description of laryngismus stridulus, arising from precisely the same cause, hypertrophy of the thymus gland, is given by Dr. Copland, in his Medical Dictionary, commencing at page 676.

PROGRESS OF MEDICAL SCIENCE.

FRANCE.

(Paris Correspondence.)

COLLEGE CLASSICS.

Now that the College has thrown open its gates to the *literæ humaniores*, and admitted Homer on a level with Hippocrates, we may, I suppose, make an occasional digression on the digamma, examine the various values of γάρ, or even ascend to the question of points, without wandering altogether beyond the subject of Chirurgy. Were it not for this excuse, I must have passed over in silence the apparition of Lord Brougham at the Institut, a short time ago. His Lordship presented a learned paper on Light, and endeavoured to uphold the Newtonian doctrine of emission against the more modern idea of undulation; but, though he spoke fluently, it was with such an accent, that it was quite impossible to follow his reasoning. Whatever the latter may have been, it did not make much impression on Arago, who hinted, that the experiments and doctrines of Lord Brougham might be more readily reconciled with the doctrine of interferences, than with the theory which he professed to support. We shall, therefore, I conclude, have a regular set-to between the Ex-Chancellor and the astronomer, as soon as his Parliamentary duties will permit the former to return among us.

DIMINUTION OF THE FIBRINE OF THE BLOOD BY AGITATION.

M. Marchal (de Calvi) reminds the Academy of Sciences that he had shown, in a former note, how the quantity of fibrine in the blood is generated by heat. Hence he was naturally led to conclude that the increase of fibrine during inflammatory affections depended, as Rasori teaches us, on the increased heat and movement of the blood. It would appear, however, that the second cause attributed by Rasori does not produce the effect which he supposed, but directly the reverse. In twelve experiments performed by the author, he found ten where agitation of the blood gave rise to sensible diminution of the fibrine. Does this explain the great reduction of fibrine noticed in animals that have been worried before death?

HÆMOMETERS.

At the last meeting of the Academy of Sciences, M. Guettet read a long Memoir on the respective values of the hæmometers invented by M. Poisseuille and M. Majendie. In order to render the subject more intelligible, it may be well to subjoin the accompanying sketches of these two instruments. Fig. 1, represents that of M. Poisseuille; Fig. 2, that of M. Majendie.

Fig. 1.

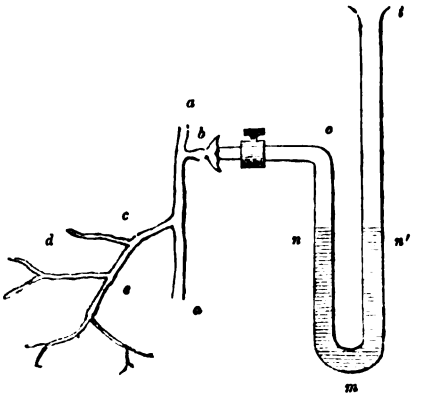
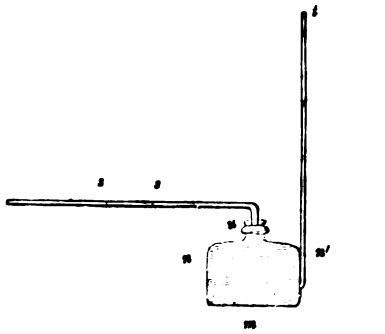


Fig. 2.



s m t is a glass tube bent at *m* and at *o*. It is filled with mercury, say to *n n'*, and the extremity, furnished with a turn-cock, is adapted to the artery of an animal at *b*. This done, the stop-cock is open, the blood admitted, and its pressure on the column of mercury at *n*, indicated by the elevation of the column *n*, will measure the force of the circulation. To prevent the blood from coagulating, it is necessary to place a small quantity of carbonate of soda in solution, in the tube *n o*.

M. Majendie's instrument is a small bottle, *m*, filled with mercury, and furnished with two tubes, one *s s*, which communicates with the artery; the other, perpendicular, to indicate the height to which the mercury may rise. As this tube is very small, the variations can be readily seized, and, in many respects the instrument of M. Majendie appears superior to that of M. Pouisseuille. This was found to be the case in practice also, for the author, assisted by M. Bernard, made numerous comparative experiments with the two instruments during the last year. In the first place, the hæmometer of M. Poisseuille—and this is a curious fact—does not oscillate in correspondence with the systole and dyastole of the heart, but in correspondence with the inspirations and expirations. The cause of this evidently lies in the faulty construction of the instrument; for, when the column *m n*, falls, it disturbs the column *m n'*, and, as the respiratory pressure is more ample and more sustained than the cardiac, it gradually overcomes the latter. In M. Majendie's instrument, the mercury may fall from the tube *I n*, into the little bottle *m*, without in any way affecting the contents of the tube *ss*.

CHOLERA CONTAGIOUS.

At the Academy of Medicine M. Pellarin communicated an important case, which seemed to prove in a very clear manner the transmission of cholera through means of clothes, and particularly through a mattrass on which some persons affected with cholera had slept.

TREATMENT OF CHOLERA IN PERSIA.

The French consul in Persia has communicated for publication the mode of treatment found most efficacious against cholera in that country. On the first appearance of the symptoms, the patient is placed in a cold bath for two or three minutes, care being taken to immerse the head for a second or so On being removed from the bath, he is wrapped in a wet sheet, over which is placed a blanket. As soon as the skin becomes hot, from 10 to 16 ounces of blood are drawn from the arm, according to the strength of the patient. The wet sheet is kept on for four hours at least, during which time the patient drinks a cold infusion of some aromatic, as sage, mint, &c.; and takes pills of calomel, opium, and ipecacuanha. If benefited, the pills may be omitted on the second day; if not, they must be repeated frequently. The sun-worshippers, it would seem, have heard of hydropathy.

NEW CAUSTIC.

M. Rivalié has proposed a new caustic, formed by imbibing a piece of cotton or lint with monohydrated azotic acid. This acts on the substance of the cotton, and converts it into a kind of jelly, somewhat similar to collodium. According to the author, this new preparation possesses the following advantages over the Vienna caustic.

1. It is more easily limited in its action, because it does not become fluid like the potass.

2. It produces a deeper eschar, which remains soft, and does not prevent the caustic from continuing its action on the subjacent parts. The eschars, also, thus produced, are easily removed, and we can carry the action of the caustic to the precise extent we desire.

NEW ANÆSTHETIC AGENT.

M. Rames has discovered, that the bromuret of potassium enjoys the property of bringing on a degree of insensibility, little less than that possessed by ether. When administered to the extent of five drachms during the day, it throws the patient into a kind of drunken torpor, which continues for several days. In one case, at the Venereal Hospital, the sensibility was so much diminished, that the skin could be pierced with a flat stitching-needle; yet the patient experienced no pain; while tickling the conjunctiva and fauces were unaccompanied by winking or desire to vomit. But the most remarkable point was, that the intellectual faculties remained unaffected. M. Rames is now continuing his experiments, the results of which will soon be made public.

PRESENCE OF SUGAR IN THE LIVER.

MM. Bernard and Barreswill have ascertained that the liver always contains a considerable quantity of sugar, even in animals which have been for a long period fed exclusively on animal food, and deprived of every kind of nutriment containing saccharine or amylaceous principles. This circumstance distinguishes the liver, in a chemical point of view, from every other organ. The fact has been confirmed at the laboratory of Giessen.

IRELAND.

[Dublin Correspondence.]

FUNGUS HÆMATODES.

The subject of "Fungoid" diseases of the Eye has lately attracted much attention in Dublin, from some practical observations of Dr. Jacob's, as to the true nature of certain tumours of the organ of vision, not very well understood, or, perhaps, not hitherto well described. Now that the subject is started, every one, of course, has seen the disease over and over again, like every one who has seen the boors in a Dutch picture, and made nothing of them. To the eminent practitioner above named we are indebted for bringing this subject so prominently forward.

True *Fungus Hæmatodes* of the orbit, it need scarcely be said, is one of the most fatal and fearful diseases with which we are familiar. Originating, perhaps, as an ordinary rule, in the tissues behind the eye, it not unfrequently destroys the entire optic nerve, the eye-ball itself remaining, for a time, comparatively sound; or attacks the latter, producing that hideous appearance of the organ which, once seen, is never to be forgotten.

Nearly related to colloid and scirrhus, it is, of course, all but incurable. Characterised, like these, by the same gradual transformation or destruction of tissues, the same fatal reproductive peculiarities, the same generic cells and stroma, that mark true cancer, and which have hitherto baffled the varied resources of our art.

The tumour mentioned by Jacob, though to appearance a very formidable affection, has none of the peculiarities mentioned. The surface of the eye, we need hardly say, more correctly, the structure of the conjunctiva, is subject to injury from all varieties of extraneous bodies,—from the *larvæ* of insects, with their regiments of flies; to horns, and actual locks of wool and hair depending therefrom. Its epidermoid structure at once accounts for such things.

Melanosis is another of the diseases of the eye, of a distinctly fungous nature, and frequently found with the other disease just spoken of,—the latter, however, is always attended with pain, sharp, and lancinating, with evidences of constitutional excitement, and towards the latter stages with mischief in the neighbouring glands, and great exhaustion; in melanosis, on the contrary, there is none of this dreadful pain, —the disease seems more benign, so to speak. It protrudes through the eye, and may be cut off; it may occur in the eye-lids, under the conjunctiva, on the cornea, or in the cellular membrane of the orbit itself. It seems to have a powerful tendency to spread, and the liver, and even the bones, will be found full of it after death; it is not, however, so fatal as fungus hæmatodes.

The particular growth to which Dr. Jacob has drawn attention, is a spongy, black, flattened tumour, not unlike melanosis, growing from the front of the eye-ball, lapping over the eyelids so as to close up the entire opening of the organ of vision. Mackenzie has seen the same thing, if we remember rightly, as well as Travers and Wardrop. It appears to grow from the eye-ball, but Dr. Jacob, cutting on it, was surprised to find it merely attached to the conjunctiva—the rest of the eye was sound. In the first case mentioned by Jacob some doubts arose as to its malignant character; but this seemed to set it at rest, to the delight of all parties; Dr. Jacob giving it as his opinion, that it was a mere cutaneous or tegumentary growth—no very distant relative of the "wart" tribe. The woman has gone out well.

The second instance of the disease alluded to by Dr. Jacob, was a tumour removed by Dr. Banon; black; in the opinion of both not malignant; perhaps, however, calling for the knife as loudly as if it were.

A third very striking case was met by him also, that of an old man—the tumour considered at the time to be carcinoma. Looking more closely at it, however, Dr. Jacob discovered that it had nothing in common with malignant growths of this family. Consisting of coarse fibres, standing out perpendicularly from the eye, the surface seemed not at all ulcerated; but the seat of a peculiar organisation, capable of throwing up a singular cream-coloured matter.

It was pronounced cancer by some people, doubtless not very wise on such matters; but when it came to him he called it a "wart," a rather different, and not quite so learned a diagnosis, but perhaps the true one. Clearly some sort of epidemic growth of no very dangerous character; the glands of the vicinity in no way implicated. Even in the healthiest people, especially elderly persons, Dr. Jacob has noticed a tendency to deposits of this black matter in the otherwise normal coverings of the eyeball,—a point of no little practical value as coming from a man of such extensive opportunities of seeing eye cases.

Warts, we need scarcely say, have a tendency to appear where the skin is thin and sensitive. Travers, if we mistake not, long since assimilated sundry growths of this kind to the obstinate warts that grow inside the prepuce, attributing them, with what truth it is difficult to say, to the same cause—irritation from diseased secretion; the peculiar secretion, indeed, from warts of the prepuce, would appear to have something of a contagious character wherever it makes its appearance, especially on the female genital organs, producing a thick crop of these very unmanageable and troublesome productions in the penis itself, not unfrequently giving the glans a perfect cauliflower appearance. A variety of the disease of the conjunctiva not unfrequently met, is a set of warty excrescences, red and granular like a bunch of currants, these of course differing materially in appearance from the disease brought under notice by Dr. Jacob.

As to the malignant character of tumours, Dr. Benson thinks that *colour* has nothing whatever to do in the matter. The ordinary run of Society-goers, by the way, thought the microscope had long since settled the question; but Dr. Banon has given a complete knock-down to the histologists, as he declares he gave parts of the same tumour to different men eminent in such researches, who all gave opposite opinions as to the presence of the peculiar cells so characteristic of malignant growths. It is barely possible, however, that they all had not the same magnifying powers at command. The exact line of demarcation between "warts" and "malignant tumours," singular though it may appear, seemed also a puzzle—Dr. Jacob himself looking upon it as more apparent than real!

PATHOLOGICAL PREPARATIONS.

A sort of spherical glass, containing pure water, has been used in Dublin, by Dr. Jacob, for putting up extemporaneous preparations. The latter are better seen; the water preserves their natural appearance; and they are not, of course, so expensive as the spirit preparations; the flocculent and more delicate details of some preparations are better preserved than in alcohol, which invariably injures and whitens. Perhaps creosote or sublimate would be a still greater improvement.

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THE MEDICAL TIMES.

SATURDAY, FEBRUARY 9, 1850.

A DEPUTATION from the Committee of Poor-law Medical Officers had, on the 2nd inst., a most important interview with the Poor-law Board. We have inserted a report of the proceedings in another column. For some time past there has been a lull in the agitation for redress of the grievances which this Committee was originally formed to press upon the notice of the Legislature, but the opening of another Session of Parliament has again called forth their exertions, and we trust that some real improvement upon the present system will ere long be effected. Perseverance and firmness are necessary for the success of every public question, and in none will these qualities be more required than in that of Poor-law Medical Reform, whose advocates have to contend against the obstinate prejudices and sordid greed of local authorities, and the immobility of a cautious Central Board.

The Deputation was courteously received by Mr. Baines, the President, and Mr. Nicholls and Lord Ebrington, members of the Board, and the grievances they felt it their duty to complain of were listened to with attention and interest. It will be seen that Mr. Lord urged upon the notice of the Board the fact, that they had full power to regulate the ordinary salaries of the Medical Officers—a point of considerable moment, as it places the odium of the present system of low payments upon the shoulders of the central Board. After this public statement, assented to by the Board itself, it will not be safe or becoming for the Board to profess sympathy for sufferings it has the power to relieve, but refuses to exercise; and should the Board continue to decline the regulation of the salaries of the Medical Officers, in accordance with the powers they hold, the Profession will understand who are their real enemies, and will not be slow to adopt some other mode of obtaining redress than that of humbly proffering their petitions to a Board so reluctant and wary in forming its decisions.

The Deputation also urged the injustice of the orders issued by the BOARD OF HEALTH, in reference to the extraordinary medical service required to meet the exigencies of the public in consequence of the late epidemic. The idea of placing the superintendence of the Poor-law Medical Service under the Board of Health was broached, and many considerations were offered to show that this alteration might be beneficial. The Committee have done wisely in taking this step. It is one of a practical onward character, and has the advantage of anticipating results which events are of themselves tending to accomplish. Forwarned is forearmed. The Committee will not, of course, stop here; but will set to their work manfully, and endeavour to realise a change indicated by the resolutions adopted at the very commencement of their career. There is an opportunity of converting their theory into practice; and we shall be glad, at any rate, if one step be made to rescue them from the degrading bondage in which they are now held by Boards of Guardians. The plan suggested is that we have advocated in this Journal; and, as we are convinced of its good policy, we heartily wish for its success. Medical relief should be separated from General Relief, and administered by a perfectly distinct Board, which should be composed of well-instructed Medical men. There can be no doubt that the Superintendent Inspectors, appointed under the Board of Health, would be members of the Medical Profession, and this alone would be a great improvement upon the present system. Mr. Liddle, it will be seen, although adopting some extreme views, pressed the consideration of this subject upon the Board.

A matter of great immediate interest was referred to by Mr. Ross. He inquired whether the intention expressed by Mr. Baines, during the last Session, of bringing into Parliament a Bill for the formation of a SUPERANNUATION FUND for Poor-law Officers would be carried out, and whether such a Bill was in actual progress. The Board replied, that the Bill was under consideration,—that the mode of forming the fund would be by *levying a* PERCENTAGE upon salaries, and that the MEDICAL OFFICERS, in consideration of their being in private practice, *were* NOT *included* within its provisions. Mr. Ross presumed that the Bill would be modified, to give such Medical Officers the OPTION of joining the Fund as shall agree to a reduction from their salaries being made.

If the Board should not act upon the latter suggestion, the claim of the Medical Officers to the advantages of a Superannuation Fund will not be barred, and perhaps they would be in a position to seek better terms under a re-

constitution of the entire system. There is, however, no time like the present, and the indifference to the interests of the Medical Officers shown by the Board in this their most recent act, does not augur very favourably for their good-will to this body, and is a bitter comment upon their friendly professions.

There is no class of officers that deserves so well of the public as the medical officers of Unions. Exposed to climatal vicissitudes, and to pestilence; harassed by anxieties of mind and bodily fatigue, their health is more severely tried than that of most other professional men, and yet they are requited more shamefully than the veriest drudge to the necessities of our mammon-loving community. Redress must be given to them; and, if they boldly persevere in their sacred cause, it will come soon. We have not the least doubt, that the Committee sitting in Hanover-square will exert themselves with that energy which, on all important occasions, has characterised their proceedings, and will find a reward for their labours in the ultimate success of their cause.

MR. SYME ON MEDICAL REFORM.

Any scheme of Medical Reform which does not acknowledge as its basis the right of the members of our Profession to elect the body to preside over their welfare, will experience our strongest opposition.

Mr. Syme's scheme is exceedingly simple. Its great merit, according to its author, is its freedom.

"I would propose," says Mr. Syme, "that Government should constitute a Board, which, for the sake of distinction, might be named the Medical Council, and be charged with the following duties:—1. To determine what amount of education should be held requisite for obtaining the license of general practice. 2. To sanction or constitute Boards for bestowing the license of general practice in London and Edinburgh, and also in Dublin, if the measure should be extended to Ireland. 3. To publish a register of qualified practitioners, together with the degrees, diplomas, or other honorary distinctions which they have acquired."

In this scheme there is no trace of a representative principle. The Government are to appoint the controlling Council, and that body is to determine everything. There is no guarantee, that a single member of the Council, much less a majority, shall consist of Medical men. There is no security that its President may not be a titled Mesmerist, or an honourable Homœopathist.

Mr. Syme says, "Confidence must be reposed in Government, and the distinguished men who would doubtless be selected for an office of so great honour and responsibility."

Let the members of our Profession beware. What confidence have they in the distinguished members of the Board of Health? If that Board could be framed by the Government without one Medical member, with scarcely a Medical appendix, what reason have they to expect, by direct appointment from the Government, a better constituted Medical Council? None! The foundation of Mr. Syme's scheme will, we believe, be condemned by the Profession with one voice. Who could anticipate better Medical government under the new Council than under the old Corporations? Mr. Syme sneers at the General Practitioners of England; we suppose, therefore, few of their number could expect seats in the Council.

The London University has a Senate appointed by the Government. Are its graduates satisfied with its constitution? The only plea urged for refusing them the privilege, nay, the right, of electing that Senate is, that at present they are too few in number. Can such a plea be urged for denying to the whole Profession the right of electing their governing Council? Perhaps they are too numerous. If so, we should be glad to know what really is the happy number suited for an electoral body.

But supposing a Medical Council formed, as Mr. Syme proposes, should we be any nearer an amicable settlement of the points in dispute than we are at the present moment? Not at all. By avoiding the details, Mr. Syme only passes over the whole difficulty instead of solving it. Let us, by way of illustration, refer to the third function of the proposed Council. Every member of the Profession allows, that a good registration would be a boon. But examine the evidence given with reference to the defunct Registration Bill, and the practical difficulties in the details are seen to be almost insuperable. The General Practitioner claims to be placed on the same page with the Presidents of the existing Colleges, while the Pure vehemently exclaims,—*Odi profanum vulgus!* It is folly for Mr. Syme to point to Edinburgh with its *one pure*, and declare the matter easy to adjust; in London, practically as well as theoretically, there are Physicians, Surgeons, and General Practitioners, and a Medical Reform Bill must be framed to meet the requirements of London as well as the wishes of Edinburgh. Nor is the difficulty to be got over by referring the details to a Council based on Secretary of State patronage; a Council, the dicta of which no one would respect, because it would lack the *prestige* of the old Corporations, while it would have no popular element in its composition to compensate for the absence of that *prestige*. The Regius Professors, being Government nominees, would, in a Board framed as Mr. Syme advocates, constitute, probably, the medical members. Mr. Syme is a Regius Professor. The President of the Edinburgh Board would, doubtless, be a Pure. Mr. Syme modestly alludes to himself, in the pamphlet before us, as the "one pure," the *only* pure surgeon in Edinburgh. Can it be? *Hinc illæ lacrymæ.*

In conclusion, we entreat the Lord Advocate not to be beguiled by the glowing picture of the medical millennium with which Mr. Syme has closed his letter, for we can positively assure his Lordship that a scheme of Medical Reform, based on State patronage, would be as distasteful to Scotch graduates as to English licentiates; nay, we much doubt if the Regius Professor could persuade even one graduate of Edinburgh, not stimulated like himself by the desire to get pupils, to second the adoption of his crude and illiberal scheme of Medical Reform.

We had intended to have passed by in silence Mr. Syme's Quixotic attack on the Fellows of the College of Physicians, but the letters we have published in another column force it on our notice. Truly, the Regius Professor must be blessed with a pugilistic spirit thus to create giants out of windmills. The Fellows of the College of Physicians have never been called upon to express an opinion—collectively they have never had an opportunity—with reference to the adjudication of the "Swiney Prize;" and consequently they can have neither supported nor identified themselves with the gentlemen who awarded that Honour.

The President of the College of Physicians, since he has at last condescended to vindicate his honour, might have informed Mr. Syme—by his long silence he appears to have despised the oft-repeated opinion of the Profession—who nominated the *three Fellows* of the College to act as judges in the matter referred to. Whatever Dr. Paris may imagine, we know that, unless the whole affair is explained, a blot will remain on his escutcheon, so long as the records of the College over which he presides exist.

THE PRACTICE OF PHARMACY BY GENERAL PRACTITIONERS.

It may be expedient to refer to a few more points in the Memorials presented to the Council of the Royal College of Surgeons by the Shropshire and Manchester Associations; and that because there are views expressed in these documents which, if carried into practice, would, in our opinion, under present circumstances, be the most deadly blow that could be inflicted upon the General Practitioners of this country. We confess at once, that not less by our previous labours, than by inclination and conviction, we are pledged to the advocacy of the interests of this order of practitioners. Encouraging science wherever it may be found, and resolving, so far as our influence can extend, that the true respectability and just rights of all orders of the Profession, such as by the customs and necessities of society they have been created, shall be maintained, we still regard with predilection the numerous and long-injured class of General Practitioners; and we, therefore, feel particularly sensitive and indignant, when propositions are broached, and professedly by men of their own order, which can have no other effect than that of inducing persecution and debasement. We must, however, express the conviction, that while it is the duty of the Journalist to give utterance to his opinions regarding a class, or even individuals of that class, still it would be a more noble pursuit, and much more congenial with our taste, to view the whole Profession as one body, aiming at one end, and the interests of the individual being also the interests of all. When shall such a devoutly-wished-for consummation be realised? We fear, Echo will merely answer "When?"

The two Memorials referred to, place an interdict upon the advancement to the rights and honours of the College of those members who practise Pharmacy,—in other words, who prescribe and dispense medicines for their own patients. We can understand how the officers of the Shropshire Association can agree to fix such a stigma upon the General Practitioners, since, in point of fact, they do not belong to the same order. They describe themselves as the Physicians and *Surgeons* (Fellows?) of the Shropshire Association; and, in a question of this kind, it must not be disguised, that Phy-

sicians are influenced by the wants of society in a different manner from the General Practitioners, and governed by different motives. Their interests, too, are often directly hostile to those of the General Practitioners. We have a high respect for the learning and ability of the Physicians of this country, but we cannot consent to their being received as the representatives of the interests of the General Practitioners; and, inasmuch as the latter order do not often busy themselves with the peculiar privileges of the class of Physicians, it would be quite as becoming if the Physicians refrained from volunteering unwise counsel to the General Practitioners. We hope that a collision between the several classes is far distant; but one of the surest modes of accomplishing such an issue is that adopted by the Physicians of Shropshire, who address their remonstrances to a College of Surgeons with whom they have no corporate relations, and, at the same time, take the opportunity of aspersing the General Practitioners, for whom they have no sympathy. If those gentlemen are acting upon the desire of abolishing all class distinctions, it would be better for them to confine themselves to the duty of breaking down the barriers hemming in their own privileges, —a task which they would discover to be sufficiently arduous and honourable for the exercise of their ingenuity and ambition.

Let us come, however, to the Manchester "Memorial," a copy of which lately appeared in our columns. The first provision in that document sets forth, that all existing members who have attained, or may hereafter attain a fifteen years' standing, shall be eligible to the Fellowship, "provided that the candidate do not *openly* trade in medicines." This reservation, taken literally, provides a premium on hypocrisy. The candidate must not *openly* trade in medicines, but he may do it *secretly* if he please. The objection is not against the trading in medicines, but against the candid and manly profession of it. We presume—for we desire, for the purposes of argument, to attach a more creditable meaning to this clause,—that the reservation means that the member of the College shall be permitted to send medicines to his patients, but that he shall not charge for them; but then we remember, that the Manchester gentlemen permit the trading in medicines, and, therefore, can have no objection to charging for them,—this being, as Manchester men especially ought to know, the principle of trade. We fear that the medical politicians of Manchester will not do much credit to their city, and we would advise them to eschew subjects with which they have so imperfect an acquaintance. We really cannot understand the sentence. The truth is, there is a wicked *animus* in the provision, which the Memorialists were afraid to imbody in words; hence the obscurity.

We have a great objection to shop-keeping, as a morbid growth in the profession of Surgery; and we also regret that medical men are in the habit of charging for the medicines supplied rather than for their skill. But we must protest against this practice being made the ground of exclusion from the exercise of their rights as members of a Corporation. We are a shop-keeping community; and perhaps it is to be deplored, that, in some localities, the prejudices of society are so strong that patients would decline to pay a bill that did not comprise the particulars of the visits and of the medicines administered to them — that medical men are constrained to succumb to so inveterate a custom. Where is the General Practitioner who would condescend to the toil and trouble of making up his Christmas accounts, if his patients would pay at a mere notification from him of the amount? It cannot, of course, be admitted by any practical man that a surgeon in general practice can be paid by daily fees in the same mode as his more fortunate *confrère* the physician, although a contrary opinion may be the source of the delusion under which all fee-takers appear to labour upon this question. The middle classes, and, *à fortiori*, the poor of the country, will always demand—as they have hitherto done by immemorial usage—the rendering of an account for medicines; and it would be grossly unjust to deprive men, who are forced thus to act in accordance with the traditions and customs of society, of their legitimate corporate right.

No legislation can ever alter the habits of society in this respect; for, although some men may be enabled, in particular instances, to obtain payment for their services as General Practitioners, without rendering a bill of particulars, yet at present there are exceptional cases, and perhaps their immunity from the bondage under which the rest of their brethren labour, is rather owing to local circumstances than to their own independent spirit. While the custom continues, it must be tolerated; otherwise, the restrictions proposed by the Manchester Committee would constitute one of the most odious and oppressive of tyrannies—a moneyed oligarchy—determined by the accident of connexion, property, or situation. In a profession like ours—undoubtedly the most intelligent and scientific in the country—the only aristocracy should be that of learning, science, and genius; and these high qualifications cannot be degraded in the person of a General Practitioner. The truth is, the necessities of society are gradually increasing the number of those persons who dispense their own medicines; and we know in this metropolis many graduates of universities, of high repute, and generally supposed by the reading public to be Consulting Physicians, who, having failed as mere fee-takers, have joined the order of General Practitioners, and send out their own medicines—or, in the words of the Memorialists, more or less "openly trade in medicines."

If such legislation as that proposed by the Manchester Committee could be effected, it would drive the majority of the Profession out of its ranks; for, as we are all influenced by private interests, there are thousands who would prefer getting rich by accommodating themselves to the wants of the community, than becoming poor by qualifying for the Fellowship of the College of Surgeons. These restrictions are premature, and therefore impracticable.

There is, also, a great oversight in this Memorial, which entirely deprives it of the confidence of the General Practitioner; inasmuch as it makes no condition for the protection of this class, in their daily practice, from the scandalous aggressions of quacks, and chemists and druggists. The latter order, especially, by means of their open shops, trench largely upon the peculiar province of the General Practitioners, and deprive them of many thousands of pounds annually — compelling the legally qualified man to enter into an undesired competition with these wrong-doers, for the sole purpose of earning an honest, though a bare, livelihood. Yet the Manchester Committee, without seeking for the slightest protection from these unjust practices, would coerce thousands of their brethren to come under the purview of a system that would entail either their utter and immediate ruin as men, or their degradation and disgrace as surgeons.

In the 2nd Provision, the Memorialists follow out their proposition to its *ultimatum*, and desire to disqualify for the Council all "Fellows engaged in the practice of Pharmacy." We, at any rate, learn from this clause, that a Fellow may practise Pharmacy, though he may not trade in Pharmacy. Would that some good genius would clear up our faculties, and enable us to understand these refinements! We are very straightforward, plain-speaking people, and do admire perspicuity, especially in philosophers and legislators. We have already given our reasons for disapproving of restrictions upon those members who charge for medicines; and we now unhesitatingly express our unequivocal condemnation of a proposition that would, if converted into law, exclude one and all of the leading General Practitioners in this Metropolis and the Provinces, however scientific and high in social station they may be, from the superior honours and privileges of their own College.

It is hardly necessary to enter into an exposition of the expediency of a knowledge of Pharmacy to a Physician. Every sensible Physician makes an effort to acquire such knowledge, and therefore confesses to its importance. It was the monks of the Middle Ages who first separated Pharmacy from the art of prescribing; and the present outcry against their union is a mere monkish prejudice and unprofessional affectation. The real interests of the Profession and the public cannot be sacrificed to vainglorious aspirations of gentility; and when men become ashamed of their Profession, it is time for them to quit it, or its advantages will soon quit them.

Our readers will see, that there are too many serious objections to these Memorials to permit of their being received as the exponent of the wishes and interests of the General Practitioners. If they had been drawn up by persons unused to the development of their ideas, or personally unacquainted with the manifold relations of the subject upon which they had undertaken to offer counsel, we might have regarded them with leniency; but we fear that, in this case, there is a strong class-bias in operation, which demands from us an emphatic exposure of the errors to which it desires to give effect.

DRS. CAMPBELL AND HOOKER have been released by the Rajah of Sikkim, and permitted to return to Darjeeling. They had not arrived at the time the report was sent off.

REVIEWS.

The First Medical Report of the Hospital for Consumption; presented to the Committee of Management by the Officers of the Institution. London. 1849. Pp. 42.

This very able Report does great honour to the Medical Officers of the Brompton Hospital. It is very carefully drawn up, and although only a limited number of points are discussed, it is hardly to be desired that it should be otherwise in a first Report. It is not advisable that the whole subject of Consumption should be brought under review until a few more years shall have collected a greater amount of material than could be the case at present. The first Report of the Consumption Hospital is, then, wisely confined to those points which can be most readily decided by the observations already made.

We shall attempt, at present, to give such an abstract of the Report, as may place the pith and marrow of it before our readers. The points elucidated are the following; the age, sex, social condition, and trade most liable to consumption; the influence of hereditary predisposition; the indications of the spirometer, and the occurrence of hæmoptysis in phthisis; the general results of treatment and the special influence of certain medicines, such as naphtha, cod-liver oil, &c. The observations are made during the years 1842 to 1848 inclusive, and on 888 in and 3470 out patients. During this period, more males were admitted into the hospital than females; in every 100 patients, 61 were males and 39 females. Taking both sexes together, the age most liable was in the decennial period from 25 to 35; but separating the sexes, it was found, that women were comparatively more liable than men at a younger period, and men more liable than women at a later period. Thus, under 25 years of age, the liability of women was 10 per cent. more than that of males; over 35 the liability for males was, on the contrary, 12 per cent. more than for women. After the age of 35, the liability for both sexes declined, and diminished regularly for each successive decennial period. The decrease, of course, appeared much more than it really was, if correction was not made for diminution of population, but when this was done, it was still found that, at each decennial period after 35, the rule was, that fewer persons were attacked with consumption, out of those who were alive at that age, than would have been the case in any of the former decennial periods after 25. Below and up to 25, the liability of the decennial periods rose, as gradually as they afterwards fell. With regard to the effect of marriage on the development of phthisis, the numbers are not sufficiently great, nor the other elements of comparison sufficiently accurate to lead to any certain results; but it appears, that under the age of 25 more females were married than males, but over 25 more males than females; the single consumptive females under 25 were more numerous than consumptive males, over 25 the sexes were nearly equal. Comparing the married persons under 25 with the married patients at a General Hospital under 25, it appeared that the consumptive married people were rather more numerous, in the proportion of 9 to 7. Over 25 the proportions were nearly equal. This would tend to show that marriage had little effect. With regard to trades, the difficulties of classifying and of putting together various employments, have not allowed any decided inferences to be made. It would seem that printers and compositors, clerks and shopmen applied in greater numbers at the Consumptive Hospitals, than do the same classes at other hospitals for non-consumptive diseases. The proportion is nearly 4 to 1. In-door servants applying at Brompton were twice as numerous as the same class applying at a General Hospital. Needlewomen and milliners were also more numerous. Thus, if at a General Hospital, 13 needlewomen apply for relief from all diseases, the numbers applying at Brompton for consumption alone would be 18. With regard to in and out-door occupations, there does not appear to be much difference between the number of persons following these employments, who apply at the Consumptive, or at a General Hospital. The next point discussed is hereditary predisposition. It appears, that out of every 100 consumptive males, 18 could be proved to have had consumptive parents; while, out of every 100 consumptive females, 36 were descended from phthisical progenitors. Hereditary influence seemed thus more marked in females than males. Comparing these numbers with those which are obtained from insane persons, who are descended from insane parents, in the proportion of about 12 per cent., the reporters argue, that consumption is clearly proved to be more often transmitted from one generation to another, than insanity—a disease which every one believes to be very frequently so transmitted. It is not a little curious, that Dr. Walshe, in his admirable Report, (a) gives numbers which closely correspond to these, (viz., 19 and 33 per cent.,) and yet arrives at an inference diametrically opposite to that stated by the Report now before us. Dr. Walshe, with the same numbers, determines that phthisis in the adult hospital "population of this country is to a slight amount only, a disease demonstrably derived from parents." This is certainly a singular discrepancy. We are disposed, after a careful consideration of the subject, to consider Dr. Walshe in the right, and to regard the comparison of phthisis with insanity as erroneous. But our limited space does not permit us to enlarge on this head. The hospital reporters adduce some very interesting evidence to prove, that when transmitted, the phthisical parents are more likely to transmit the disease to children of their own than of the other sex.

The spirometer observations were made by Dr. Hutchinson, and imply a gradual diminution in the "vital capacity" (b) from the onset of the disease to its termination. The chapter on Hæmoptysis is very interesting. Of every 100 consumptive persons, 63 suffered from hæmoptysis at some period of the disease. Sex exerted little, age a considerable effect. In males, under 35, hæmoptysis occurred in 64 per cent.; in females, under 35, in 67 per cent. In males, over 35, hæmoptysis occurred in 64 per cent.; but in females only in 54 per cent. Thus, while in males age exerted little or no influence; in females the tendency to spitting of blood was greater in the earlier periods of life. The period of the disease had a great effect. Thus, in both sexes, before softening of tubercle had occurred hæmoptysis was three times more frequent than after softening.

In regard to the duration of phthisis, it was rarely fatal under 3 months (in only 1 case); 10 per cent., in round numbers, died under 6 months; 16 per cent under 9 months; 13 per cent. under 12 months; 15 per cent. under 18 months; 10 per cent. under 2 years; and 10 per cent. under 2 years and 6 months; only 2 per cent. under 3 years; 4 per cent. under 3½ years; about 2 per cent. under 4 years; and 6 per cent. at all ages above 4 years. So that the great mortality of phthisis fell on the period between the first 3 months and 2½ years; the proportion being rather greater in the earlier half of this period. The disease was more rapidly fatal among males than females.

The results of treatment were very favourable. In the early stage nearly half the patients were relieved to a greater or less extent. In not less than 12 per cent. of males, and 7 per cent. of females, the disease was arrested. In the second stage rather more than half were relieved from their distressing symptoms. In the third stage, *i.e.*, after cavities had fully formed, the symptoms were mitigated in about 25 per cent. of both sexes. These favourable results are attributable to the excellent site of the Hospital, to the regulated temperature of its wards, in common with the judicious treatment of the medical officers. In speaking of individual remedies, allusion is made to naphtha, which had no specific effect, and although occasionally useful in bronchitis with profuse secretion, sometimes acted very injuriously; to iron, which was found a very useful auxiliary, and to cod-liver oil, which was decidedly the most useful single agent that was employed. The symptoms of the disease were generally mitigated, sometimes arrested by its use; weight was frequently gained, and the improvement thus gained was sometimes permanent. In other cases the improvement was temporary, and in some there was no melioration at all.

In concluding this brief abstract of a very interesting Report, we cannot but feel gratified at the mode in which the Report has been drawn up. Classified observation has been attempted, and with considerable success. We would only beg to impress upon the Reporters the necessity of a strict attention to the accuracy of their items. There is this disadvantage about the numerical method, that its mistakes, if such exist, are perpetuated. If an individual enunciates a wrong opinion, it may be repeated for some time, but will necessarily soon be forgotten in the multitude of other opinions that are continually broached. But numerical observations are used by writer after writer, and are joined to other observations which are supposed to be of a similar nature, and, consequently, if the original observations are not correct, they must necessarily vitiate those facts which may be really true. This is no objection to the numerical method; it is only an additional reason for accuracy.

Therefore we should desire to see, in the next Report, the observations assigned to their respective authors, that each observer may be answerable for his own facts. Not that we in the least question the accuracy of the statements made on the common authority of the Physicians to the Consumption Hospital; only as a general principle, in matters of science, we should be able to refer every assertion to some one who may be for it sponsor and authority. Then, if we distrust the sponsor, we may neglect his facts.

It must not be supposed for a moment, that, in these remarks, we are referring to the excellent Report now reviewed; we are taking our stand merely on a general principle, which applies to all of us.

(a) British and Foreign Medico-Chirurgical Review, January, 1849, p. 235.

(b) The phrase employed by Dr. Hutchinson to the utmost quantity of air which a person can *expire* after a forced inspiration.

LIVERPOOL DISPENSARIES.—The number of cases of cholera attended by the medical officers of these institutions, during the past year, was 1017. 721*l.* 17*s.* 11*d.* was the amount collected in their behalf on the day of fasting and humiliation. The subscriptions, for some time past, have fallen off greatly; the annual income, which, three years ago, was 2066*l.*, is now only 1722*l.* Last year, however, the receipts were 3,155*l.* 11*s.* 7*d.*, leaving a balance of 334*l.* 16*s.* 3*d.* over the expenditure.

GLASGOW INFIRMARY.—The workmen on the Clyde clubbed together at the commencement of the present year, and sent a sum amounting to nearly 300*l.* to the Glasgow Infirmary. This was a noble way of welcoming another year of existence.

REPORTS OF SOCIETIES.

WESTMINSTER MEDICAL SOCIETY.

FEBRUARY 2, 1850.

F. HIRD, Esq., President, in the Chair.

CARIES OF THE HEAD OF THE FEMUR.

Mr. Haynes Walton exhibited three specimens of caries of the head of the femur, removed during life, to show the alteration in form and structure effected in the thigh bone by morbus coxarius. The first was taken from a girl nine years old. In place of the head and neck, there was a rounded and spongy portion of bone, projecting little more than half an inch from the femur. She made a good recovery. The second was from a lad twenty years old; the head was nearly gone; the neck was of the natural size, but so soft that it broke in two during the operation. The third was from a boy eleven years old; part of the head was lost, and the neck was shortened and reduced in size. He (Mr. Walton) remarked, that he was anxious to discover some diagnostic signs by which the presence of dislocation could be ascertained. Without going into the question as to the proper time for operating, but taking it as a settled question that we should wait for dislocation, it was important to be able to come to a correct diagnosis. The changes in the form of the bone he had shown, would cause all the symptoms of dislocation. The limb would be shortened and the trochanter elevated, and brought nearer the pelvis. From the position of the limb, nothing could be learned; it may be turned inwards or outwards; the thigh flexed on the pelvis or extended. Those most conversant with hip disease had fallen into error on this point. The patient from whom the second specimen was taken died three months after the operation, from consumption. The end of the femur, which was shown was rounded off and filled up, like the end of a bone after amputation, of which an example was produced, taken from a patient on whom he (Mr. Walton) had performed secondary amputation, which was also hard and healthy. When the operation was performed, it was soft like the neck; a ligament united it to the anterior edge of the acetabulum.

FIBROUS TUMOUR OF THE UTERUS.

Dr. Ogier Ward brought before the Society a specimen of fibrous tumour of the uterus, taken from a patient who had been under his care for hæmoptysis, and who died the day before in Kensington Workhouse, not having previously presented any signs of uterine disease. On examining the body, there was discovered a fibrour tumour internal to the womb, filling up its cavity, attached to the greater extent of its wall, and having its origin from the left side, near the base of the broad ligament. It was lobulated, and consisted of spherical cells; no caudate cells could be discovered. In the cellular tissue connecting it with the walls of the uterus, there were a number of small tumours, which presented under the microscope the same characters as the large tumour. That which he exhibited arose from the cervix, and was not lobulated. The tumour was well supplied with blood-vessels from the uterine walls, which were healthy, except where the growth was attached, and there they were somewhat thickened.

FOREIGN BODY IN THE INTESTINE—FÆCAL FISTULA.

Mr. Child read the particulars of the case of a little patient recently under his care, and exhibited a plum-stone, which had escaped from a fistulous opening at the umbilicus, which, he believed, had been lodged in the intestines for five or six months. His patient, a boy four years old, had suffered from hooping-cough, measles, and scarlet fever, some time prior to his present illness. The last-named disease had been followed by dropsy, from which he recovered, and seemed to enjoy good health afterwards. Some months since the umbilicus became swollen and red, and an abscess formed, which burst, and continued to discharge for several months. He was admitted into a hospital, where the opening was enlarged, and another made about two inches below it. He remained there a fortnight, and while in the hospital, feculent discharge occurred from the lower aperture. When he came under Mr. Child's care, there were two sinuses in the walls of the abdomen, one in the centre of the umbilicus, the other a little lower down; the latter yielding the fæcal discharge. His health was not much impaired. On the 16th of last month, the plum-stone exhibited was discharged from the wound, after great suffering, and it appeared, that it must have been in the intestines since the last fruit-season. After this the fæcal discharge was greater; and, on probing the wound, the instrument passed in, at least two inches in depth, backwards into the abdomen. There was no wasting, and the appetite good; bowels acted freely, and the stools were normal. Mr. Child thought it a question, whether the cause of the abscess and fæcal fistula in this case arose from the presence of the foreign body in the intestine, or from the previous ill health of his little patient. In his further comments, he quoted the opinions of several foreign writers on the formation and treatment of artificial anus.

Mr. Haynes Walton mentioned five cases of foreign bodies lodged in the appendix vermiformis, four of which terminated fatally. One a case described by Dr. Peacock, was that of a clergyman, who presented the signs of incipient hernia. An abscess formed, was opened, and a cherry-stone came away. He died subsequently, from some cause independent of this disease. Another case, also one of cherrystone in the appendix, ended fatally, from acute peritonitis. In two others, the offending body was a biliary concretion, which had been arrested in the appendix, and caused death from peritonitis.

MAMMARY ABSCESS.

Mr. Nunn then read a paper on mammary abscess.

His object, he stated, to be, to make known a particular line of practice, and the reasons which induced him to have recourse to it, with comments on the mode of treatment usually adopted in such cases, namely, hot fomentations and poultices, cold applications, leeches, and purgings. The success attending these measures varies considerably, but Mr. Nunn concludes:—

That suppuration takes place in a great proportion of cases, in spite of their energetic employment. He objected to the use of hot fomentations, as likely to favour suppuration; to cold applications, especially to ice, as risking the loss of valuable moments, while its effects on the system of the patient constitute an obstacle to its use. Leeches in sufficient number to modify the circulation, must produce a loss of blood injurious to a lactating woman, and their bites may act as a local cause of irritation. Purgatives, by diminishing the fluids of the body, lessen the secretion of milk, and consequently are not to be spoken of slightingly; they should not be given to depress the system. Having thus disposed of the usual plan of treating mammary inflammation, and then strengthened his views in most points, by a quotation from Dr. Clarke's Essay on diseases peculiar to women, Mr. Nunn proceeded to describe his own plan, namely, to confine the patient to the horizontal position, to prevent, by every possible precaution, any extraneous irritation of the inflamed organ, to envelop the breast in mercurial ointment spread on thin linen, and to cover this with a tepid poultice; in cases, when the horizontal position cannot be maintained, to support the gland by a suitable bandage: after the constitutional irritation inseparable from an attack of inflammation has been allayed by a brisk purgative and effervescing salines, and proper regimen, the state of the pulse should be most jealously watched, and the proper moment for the administration of tonic medicines carefully looked for; wine and stimulating articles of diet should be allowed only with great caution. In the majority of cases Mr. Nunn is of opinion that, after the first day or two, the patient more needs bark and ammonia, quinine and iron, than depletive drugs. The strength of the mercurial application should be adapted to the condition and natural texture of the skin covering the gland. In some instances the ung. hydrarg. fort. will not be found too powerful; in others it will be necessary to dilute it with an equal proportion of ceratum resinæ. A combination of the extract of belladonna, hyoscyamus or opium, in the proportion of ʒi. to the ℥i. of ointment, will be most effectual in allaying the intense agony frequently complained of. The leading idea in treating mammary inflammation should be the prevention of suppuration; when that cannot be avoided, the rendering it as circumscribed as possible. Mr. Nunn opposed large incisions of mammary abscess, and thought the practice of laying open extensive sinuses of the breast uncalled for. The tissue of the gland, he averred, should not be cut, and quoted Dr. Gibson, of Philadelphia, to show that sinuses may be obliterated by pressure. The importance of preserving the integrity of the gland, he (Mr. Nunn) observed, cannot be overstated. He concluded by narrating several cases in illustration of his position.

Mr. J. B. Brown disapproved of the use of mercury, and also of bleeding, in mammary inflammation. Women, after parturition, required good diet and strengthening remedies, rather than depletory measures. One great cause of inflammation of the breast was, the not applying the child to the breast early enough, in accordance with the dogma of nurses, who object to its being done for the first twenty-four hours. The small quantity of milk in the breast during that time acts as an irritant, and causes inflammation, which can be overcome by general remedies,—the horizontal position, keeping the breast supported, causing the skin to act, and by warm-water dressing. He objected to drastic purges; would allow good diet, better than before, and nature will do the rest. Parturient women cannot bear to be lowered, nor the depressing action of mercury, in whatever way it may be given. He thought mammary inflammation was often caused by keeping the patients on gruel, when they require an improved rather than an impaired diet, after parturition. If this were attended to, mammary inflammation, puerperal fever, &c., might be prevented, as they were caused by the efforts of nature to overcome the effects induced by the lowering diet. Most patients subject to inflammation of the breast were of the strumous diathesis, and could not bear mercury, which would alter the healthy condition of the milk, and affect the offspring. Mercurial ointment might be useful in chronic mammary inflammation, but it could not be used with safety, he thought, in an acute attack.

Mr. Gay agreed with Mr. Nunn in the general principles of treatment; mammary abscess was of common occurrence amongst the poor, who are in bad health, and cannot bear leeches nor depletion, but require tonics and support. It generally occurred in persons of strumous habit. He (Mr. Gay) did not think the lacteal vessels were implicated in the disease; the abscess was situated in the cellular tissue; for, after recovery, the breast generally resumed its proper action. He was in favour of the early use of the lancet in opening the abscess, to prevent the burrowing of the matter, and the formation of sinuses, which are difficult to treat. The fascia, in some cases, becomes more dense in consequence of the inflammatory action, and the abscess cannot burst through it; its early opening, therefore, he thought the best plan to be adopted. Sinuses generally healed without being laid open.

Dr. King spoke of the necessity of the horizontal position, and a certain amount of depletion, by neutral salts, in treating this disease. He commended Mr. Nunn's practice, but thought more information was needed with respect to the use of mercury. Abscess of the breast was frequently caused by the separation of the child from the mother soon after birth. He did not think leeches or bleeding would be required if neutral salts were given, and fluids abstained from. Thirst might be relieved by rinsing the mouth with cold water. This plan he had invariably found to succeed; he mentioned the case of a woman, for whom it had been twice practised with success, but the third time it was not carried out owing to the negligence of the nurse, and abscesses formed, and were very troublesome. The use of mercury was a very important consideration, and he would be inclined to try it. He could not agree with Mr. Brown, in its condemnation; its employment in puerperal peritonitis showed that parturient women could bear it.

Mr. Greenhalgh confirmed Mr. Nunn's statements by his own experience. He had tried the plan and found it successful. Sore nipples frequently caused mammary abscesses. He had treated nine cases by this plan, and in only one had an abscess formed. He (Mr. G.) did not object to the use of leeches or fomentations, but was unwilling to use poultices, prefering the spongio-piline. The horizontal position and supporting the breast were

essential. When the matter is deep seated under the fascia, he would have recourse to an early opening, as the constitutional irritation in such cases is very great, even to the extent of endangering life. In strumous cases, which are always of long duration, the application of belladonna is serviceable.

Mr. Hancock thought, in cases of occlusion of the lacteal duct mercury would be useful, as it would be probably caused by effusion of lymph, and mercury is the best absorbent. An important question respecting the management of the infant during the inflammation had not been noticed. His practice was, to keep the child to the breast as long as possible, and when that could not be carried out, to draw off the milk artificially. Mr. Nunn's plan was not original; he had used mercurial plaster to the breast for the last five or six years, with an opening in it for the discharge to pass away. He did not not consider these cases as instances of phlegmonous but of irritative inflammation. Had found hyoscyamus of great service. He objected to the early opening of an abscess, unless there be great constitutional disturbance, and said that, when he did use the lancet, he avoided incising in a direction transverse to the lactiferous ducts in order not to wound them.

Dr. Murphy drew attention to the difference in the characters of mammary abscess, and to the constitutions of the sufferers, remarking, that one plan of treatment was inapplicable to all. Mammary abscess might be sthenic or asthenic. In strong healthy young women, where the milk, from some cause, was not withdrawn, he was satisfied, if proper antiphlogistic measures were adopted, there would be no reason to fear abscesses forming. He advised the combination of antim. tart. with the neutral salines, the better to control the action of the heart. With regard to the local treatment, the feelings of the patient should be consulted as to the use of warm or cold applications. In weak and irritable women, if purgatives and antim. tart. be used, the irritation would be increased, and abscess after abscess would form. They require tonics and support. If a woman of strong constitution be placed on full diet, after parturition, mammary abscess will occur, as soon as the secretion of milk takes place.

Dr. Ogier Ward referred a great proportion of the cases of mammary abscess to the non-development of the nipple, or to the swelling of the breast causing its apparent obliteration, and also to soreness of the nipples. The treatment he employed was the exhibition of neutral salts, with or without antim. tart., as might be advisable, and the application of poultices, the warmth and moisture of which relieved the local distention and inflammation. The period for opening the abscess was when the skin was red and pointing, and fluctuation evident. The incisions need not be extensive.

Dr. Manson stated, that at the General Lying-in-Hospital it had been the custom for the last twenty years, when the breast became hard and knotty after parturition, to rub in freely the linimentum ammoniæ, as a preventive of suppuration, and so successful had this practice been, that they had scarcely ever had a case of mammary abscess. The liniment is rubbed in for ten minutes or a quarter of an hour, until the breast becomes soft and supple. He thought it acted as an emollient and evaporating lotion, while the stimulant quality of the ammonia was evidenced in the reduction of the quantity of the milk. Belladonna or opium combined with the liniment might render it more useful. When the inflammation is so severe, that friction with the liniment cannot be used, he thought the mercurial ointment might be tried, with a poultice over it. In a very severe case chloroform was given before friction was used, and successfully; the patient recovered without suppuration.

Mr. Coulson recommended the treatment of mammary inflammation by pressure, strips of soap plaster encircling the breast, being applied on the same principle as in orchitis. He considered it eminently serviceable in the incipient stage, perhaps not so much so when the disease is more advanced, but again advised it after the abscesses have burst, and sinuses have formed. The advantage attending this plan is, that the patient can go about her avocations while under treatment.

Mr. Nunn, in reply, expressed his opinion, that Mr. Brown had not substantiated his charge against the use of mercury. He had not claimed the originality of this plan of treatment, having been led to adopt it in the acute stage, on account of the great success attending its use in the chronic form of mammary abscess. He thought that the lactiferous vessels must be sometimes engaged in the disease, because, after the abscess had burst, the milk then came away through the artificial opening. He wished to be particularly understood as not recommending the mercurial ointment in that state, called "secretional congestion," when the breast is distended with milk. He could not comprehend the action of the linimentum ammoniæ, as preventive of suppuration; had recommended tepid, but not hot poultices; had not tried pressure, but could conceive it might be useful, when not able to keep the patient in the horizontal position. He recommended the use of mercury in this disease, as preventive of suppuration, by curing the inflammatory action; and he (Mr. Nunn) did not know any other remedy so effectual. He had known an instance of a breast destroyed by repeated suppurations, and it was to prevent such a result that he advised the mercurial ointment.

The meeting then adjourned.

CONVENTION OF POOR-LAW MEDICAL OFFICERS.

As the opening of the present session of Parliament drew near, the Committee addressed the following letter to M. T. Baines, Esq., M.P., the President of the Poor-law Board:—

"TO THE PRESIDENT OF THE POOR-LAW BOARD.

"SIR,—We take leave to remind you of an audience which you gave last year to a Deputation from the Committee of Poor-law Medical officers, relative to the present defective system and inadequate remuneration under which Poor-law Medical relief is administered. The admission of the well-grounded cause of our complaints, which you then made, was coupled with an assurance, that you had less power than inclination to remedy the evils and hardships under which the Union surgeons labour.

"Towards the close of the last session of Parliament, numerous Petitions from many parts of the country were presented to the House of Commons, praying for an improved plan of management and more adequate remuneration in respect of Medical relief for the sick poor.

"The alarming visitation of the cholera, and certain authoritative measures of the General Board of Health, have made the practical importance of the Poor-law Medical Staff more conspicuously apparent, and shown that it has other objects besides the mere furnishing of medicines to sick paupers. The control over Medical officers, now divided between the Poor-law Board and the General Board of Health demands notice and amendment.

"In illustration of the strong feeling of dissatisfaction at the exaction of services for Sanitary purposes from Union surgeons, we beg to call your attention to a Memorial presented to the Poor-law Board on the 29th of July last.

"During the late epidemic of cholera and diarrhœa, considerable increase of expense has been occasioned in many unions by the sudden and growing demands for extra Medical attendance. In most instances the Medical officers humanely met the emergency with promptitude and alacrity; but, in return, they have been oppressed, most inadequately requited, and, in some cases, driven to law-suits in order to obtain a moderate payment for unprecedented services, rendered during a period of extraordinarily dangerous and oppressive labour.

"We particularly desire to represent, that, strong as was our claim to your notice, and on that of the Legislature in the spring of this year, it has gained additional force from the fearful bearing of the late epidemic, and from the conflicting authority exercised by the Poor-law Board and the General Board of Health. The latter has no power to pay for labour which it demands; the former, through the Boards of Guardians, in some instances absolutely refuses to exercise the power which it has. Such has been the obvious injustice of these proceedings, that many of the dissentient members of some Boards of Guardians have even raised private subscriptions to meet the fair and moderate demands of the overtaxed Medical officers.

"Prior to the opening of another session of Parliament, we would respectfully inquire if any, and what measures of redress you may have been able to project or mature, with the power already vested in your hands.

"Should you still consider these powers so limited as to prevent you from carrying out remedial measures, we would seek your suggestions, and hope for your co-operation, in obtaining from Parliament an improved position for the Poor-law Medical Staff, and more applicable means of succour for the sick poor.

"We have the honour to remain, Sir,
"Yours, very respectfully,
"THOMAS HODGKIN, M.D., Chairman.
"CHAS. F. J. LORD, Hon. Sec.
"4, Hanover-Square, Dec. 20, 1849."

The receipt of the above having been acknowledged, with merely an official statement, that "the Board would take the subject into their consideration," it was judged expedient to seek an interview by Deputation, that the important subjects adverted to in the letter, with others relating to Union Surgeons, might be discussed, and that the opinions and proposed line of action of the Poor-law Board being ascertained, the future course to be adopted by the Committee might be better defined. On the 2nd inst., the following gentlemen were received, by appointment at Somerset-House,—Dr. Hodgkin, the Chairman of the Committee, Mr. Liddle, Dr. Barnett, Mr. Ross, and Mr. Lord, the Honorary Secretary.

Mr. Lord, in introducing the subject of the meeting, reminded the President, that when the Deputation waited on him in May last, he admitted the just claims to relief for which the Union Surgeons applied, but regretted that the means at his command were not equal to his willingness to remedy the evils so generally felt and loudly complained of. Mr. Lord, entering generally into the subject, commented particularly upon the letter in question, especially in relation to the infliction of extra work on Medical Officers during the cholera, and the gratuitous performance of sanitary duties, quite beyond the letter and spirit of their contracts, through the conflicting orders of the Poor-law Board and the General Board of Health. The large amount of service thus rendered to suffering humanity, and the nation at large, by the Union Surgeons, for a pecuniary return so insignificant, was altogether out of proportion to the means of the country and the benefits conferred. He referred to the important letter addressed to the President on the 23rd of July last, respecting his power to order better payment to Medical Officers, and quoted, in evidence, the words of the Act under which the Commission was originally formed, and also that of the 10 and 11 Vic., by which all the powers of the former were transferred to the present Poor-law Board. He then read the two last clauses of the above letter, and earnestly pressed on the notice of the Board the claims of the Union Surgeons for speedy and efficient redress. Remembering the meed of praise which, on a former occasion, the President had bestowed on the Medical Officers, he quoted, from the *Provincial Medical Journal*, the following comment:—"They may accept the compliment with satisfaction, as coming from a conscientious and well-informed gentleman, yet it may be a bitter reflection, that this very excellence—this meritorious conduct of the Poor-law Medical Officers, is an obstacle in the way of their receiving that justice which they have so long sought, and to which they are acknowledged to be so fully entitled. Were the work less well done, a remedy would the sooner be found. Did instances of neglect and inattention multiply, the evils of the present system would force themselves upon the attention of those who could adopt a remedy."

The President considered that he must, in some degree, have been misunderstood on the former interview respecting the power of the Board; he was quite aware of that power, and on many occasions it had been exercised favourably respecting the salaries of the Medical officers; but, with respect to cholera and other epidemics, the Poor-law Board had not the power to lay down any prospective scale of remuneration for extraordinary services,—but the power of granting a reasonable compensation on account of such services was vested in the Guardians, and that whenever an increase was proposed the Board had always much pleasure in confirming it. The general question of Poor-law medical relief with the scale of remuneration was so beset with difficulties, owing to

the discrepant interests of the parties concerned, that it appears more and more difficult of adjustment the more it was looked into.

Dr. Hodgkin stated that, although he was not a Poor-law Medical officer, he had for many years given much professional attention to the poor, and had, at the request of his medical friends, been a member of the Committee of the Convention from its commencement, and was fully aware of the difficulties of the subject, as well as of the painful position in which the Medical officers were placed. The occurrence of the late epidemic of cholera, and the measures to which it had given rise, might be said to divide the subject into two periods. These were measures of relief which the Convention were seeking from the Poor-law Board prior to the epidemic, and there were further grievances originating in the requisitions of the Board of Health, growing out of that event. Hence complication and need for distinction as to the points to which observations were directed. The Committee was quite aware of the difficulties with which the Poor-law Board had to contend, and did not desire to come to it as frequent and troublesome complainants, but respectfully to urge that, having, from its position, the power of taking a comprehensive view of the subject, and of knowing all the bearings of the case, it might at once seriously and in earnest apply itself to the construction of a new and better system; in doing which the data already collected by the Committee of the Convention, and the knowledge which it possessed of the minds of Medical officers, might materially assist. He had hoped that some progress might already have been made in the maturing of such a plan. He observed, that a more just and liberal payment of Medical officers would not be altogether additional outlay, as the expenditure caused by widowhood and orphanage might be considerably lessened by an improved administration of Medical relief. He noticed, that the extra duties required during the prevalence of cholera by the directions of the Board of Health had been felt to be very oppressive by Medical officers, the ordinary salary being everywhere so exceedingly low.

Mr. Nicholls replied, that, but for the interference of the Poor-law Board, the salaries would be much lower than at present.

The President stated, that the Board had no power to interfere and order payment for such services as the Board of Health required; the Guardians had, however, by the proviso to Art. 172 of the General Consolidated Order.

Lord Ebrington stated, that what had been done in this way by the Board had been by way of suggestion, as it were, to the Guardians.

Mr. Liddle stated that, for some years past, he had paid much attention to the subject, but that he held, and had published views thereon, somewhat differing from those generally entertained. He did not consider that the application only for medical relief should constitute a pauper; this was the spirit of the Vaccination Act. It would be well if the administration of medical relief to the sick poor were confined to a class of gentlemen to be restricted from private practice—the drugs being found by the Government. The duties now performed under the Registration and Vaccination Acts might be added to those of the medical officer; in this manner a fund might be formed, with an allowance for the performance of sanitary duties equal to the requirements of the proposed change. One great evil of the present control by the Poor-law Board, is the absence of a medical Commissioner at that Board. The Board of Health had been considered by some as best adapted for this service,—inspectors would be required, and the number of medical men demanded for the sick-poor would be much lessened. The present system of annual election was very bad, as it kept the medical man always in thraldom.

The President said, that it was a matter of yearly contract.

Mr. Nicholls feared that if medical relief were rendered gratuitous to all, it would be open to much abuse, and throw great responsibility on the relieving officer.

Lord Ebrington said, even now, where there is no *fixed salary*, a lax Board of Guardians, and a lax relieving officer, often place many more cases under the care of the Union Surgeon than the real poverty of the applicants render necessary.

Mr. Ross stated, that the gravamen of the complaints of the Union Surgeons rested upon the fact, that there was not a fixed standard of payment for medical services. The Medical officers required that the system should be placed upon a new basis, and that payments should be made upon a plan applicable to the labours of each particular individual, so that equal justice might be administered to all.

Mr. Baines inquired what plan the Committee proposed for that end?

Mr. Ross replied, that there was a very general opinion in the Profession, which had been also submitted in evidence before a Committee of the House of Commons, by men of great intelligence and experience, and assented to by the old Poor law Commission, that an average payment of 6s. per case throughout the country would be an adequate payment. The Committee had anxiously deliberated on this subject, and believed that the sum named was a tolerably accurate approximation to a fair standard of payment; still they were not bound to adopt that amount exclusively; and if the Poor-law Board would take this matter into its serious consideration, and collect the data whereupon to form an opinion, the Medical officers would feel confidence in the efforts it might make, and give it every assistance in their power to form a just estimate.

Lord Ebrington inquired, by what means was it understood that the value of a case could be determined?

Mr. Ross explained, that the two elements in constituting the value of a case were population and area, as already set forth in the Resolutions of the Committee, and that, as all Medical service was comprised of these two elements, there would be no real difficulty in contriving a scale of payments upon this basis. The Deputation were perfectly aware of the difficulties which surrounded the Poor-law Board, and of the delicacy with which they were obliged to exercise their powers, which, being being for the most part discretionary, were resisted by the Boards of Guardians, who considered the interference of the Central Board as an intrusion upon their just rights. Still the grievances of the Medical officers could not be suffered to remain; and it had been suggested to the Committee, who had not yet, however, adopted the opinion as a principle upon which they were prepared to act, that the transference of the jurisdiction over Poor-law surgeons to the Board of Health would be attended with beneficial results. It was believed, that the Poor-law Board, being governed in its proceedings by precedent, and viewed with jealousy by the local Boards would not be able, with the same facility, to obtain redress for the Medical officers—and the experience of many years had confirmed this opinion—as a new Board, empowered to carry out objects of great public interest, and who might have public opinion with them in the organization of a comprehensive plan of sanitary administration. The Board of Health had already required Boards of Guardians to employ Medical Officers to perform extraordinary services during the recent epidemic, and would no doubt again frequently act upon their powers; but they had no power of rewarding the Medical officers for their services; and the consequence was, that, in most instances, the remuneration was upon the same niggardly scale as for ordinary services. The Poor-law Board had already stated, that it had no power to order payment for extraordinary services, directly connected with its own department, and it could not be supposed, therefore, that otherwise than by advice, it would exert itself to procure adequate payment for work done by the order of another Board. Thus the Medical officers were sacrificed. There was a great necessity for simplifying the administration of medical relief to the sick poor; and, if sanitary duties were added to the strictly medical duties of the Medical officers, and they were placed under the authority of one Board, it is conceived that many of the grievances of the Medical officers would be redressed. The Committee would not, however, move in this matter until they had consulted with the Poor-law Board, and ascertained what probability this Board could offer of a removal or amelioration of their grievances.

A discussion then took place upon the mode of striking a scale of payments upon the elements of population and area.

Mr. Ross then inquired whether the Board had it in contemplation to bring forward any measures of redress during the present session of Parliament?

The President replied, that he was not in a condition to make any pledge that he would be able to do so.

Mr. Ross then stated, that it was very generally understood, that the Poor-law Board were preparing a Bill, providing for a superannuation fund for union officers, and, as the subject was one of the highest interest to the Medical officers of unions, the Deputation would like to be informed if they were to be included within the purview of the Bill?

The President replied, that it was true such a measure had been in progress, but that he had not yet seen it. It was not intended, however, to embrace the Medical officers within its provisions. Lord Ebrington stated the principle of the Bill was that of levying a per centage upon the salaries, for the purposes of a fund, and was of the nature of an insurance, on the same principle as was acted on in the Treasury and other offices.

Mr. Ross stated, that the Committee had not yet had an opportunity of consulting their constituents upon this point, although they felt it their duty to bring the claims of the Medical officers under the consideration of the Board at the present interview. Meanwhile, perhaps, the Board would devise a means of enabling the Medical officers to receive the advantages of such a fund, if they should so wish, by admitting them to it as members at their option.

Mr. Nicholls remarked, that this view had suggested itself to them, and promised that consideration should be given to the subject.

Dr. Barnett, in reply to a question from Mr. Nicholls, as to the mode in which salaries should be computed for Unions—the districts of which differed as to the amount of pauperism, said, that the basis of calculation being determined, namely, population and number of cases attended (on an average of three years), it would be easy for the Guardians or an Inspector to affix the amount to be paid to the several district Medical officers. Thus, in a metropolitan district, 2d. per head on the total population of a union (varying as to the amount of pauperism in its several districts) might be apportioned in the following manner:—Three halfpence per head to be paid to the Medical officer of the more wealthy district, 2½d. to be paid to the Medical officer of the more pauperised district.

The Poor-law Board considered that the readiness with which Medical men sought the appointments, presented a formidable difficulty to further burthening, in these times, the rates. The President having incidentally made allusion to the Queen's Speech, in reference to sanitary improvements, Mr. Lord took leave pointedly, to inquire of the President, if, in his opinion, a union of Poor-law duties and sanitary obligations might not be carried out under the General Board of Health, so as to combine justice to the Medical officers, and advantage to the nation, with a wholesome regard to finance? The President begged to be excused expressing an opinion on this point. Much conversation having ensued on the subject generally, the President stated, that he was not in a position to pledge himself to any particular course, observing, that great difficulties were in the way of a satisfactory adjustment of the question.

On the Deputation retiring, and thanking the Board for the patient and lengthened audience granted, Lord Ebrington replied, that they felt obliged for the many valuable considerations and suggestions afforded by the Deputation.

MEETING OF THE METROPOLITAN SANITARY ASSOCIATION.

A highly influential meeting of the Association took place at the Freemasons'-hall on the 6th inst., for the purpose of procuring from the Legislature an Act of Parliament, to provide for the improvement of the sanitary state of the metropolis. The Lord Bishop of London was in the chair, and stated the object of the meeting at great length. He was fol-

lowed by the Bishop of Chichester, Lord Ashley, Lord Robert Grosvenor, Jas. Wyld, Esq., M.P., Dr. Cumming, Charles Dickens, Esq., Dr. Farr, and other gentlemen who have taken an interest in sanitary matters. The greatest enthusiasm was exhibited by the meeting, and the following Resolutions were unanimously passed;—

1st. That, with the exception of the City of London, containing only 125,000 inhabitants, this Metropolis, with more than 2,000,000 souls, forming a large proportion of the town population of England, is destitute of any adequate provision or effective organization, whereby the comfort, health, and lives of the people can be watched over and preserved. That, although the strenuous efforts made in the Metropolitan districts to procure a sanitary enactment mainly contributed to the passing of the Public Health Act; yet these districts were the only parts excluded from the benefits of that enactment. This exclusion has led to much misery and a great sacrifice of life. In the opinion of this meeting, therefore, it is expedient that a comprehensive Bill be forthwith introduced into Parliament, to remedy the grievous evils which afflict and oppress the inhabitants generally, but more particularly the working-classes of this vast Metropolis.

2nd. That the Reports of the Medical Superintending Inspectors employed during the late visitation, have brought to light evils which fall most heavily on the labouring population, who are least able to sustain and totally unable to remove them; evils calling for the deepest sympathy, and at the same time demanding the most prompt, energetic, and carefully-devised means of relief.

3rd. That in the metropolis the late epidemic destroyed 16,000 persons, of which number it is estimated not one-half would have perished had the measures of prevention finally adopted been timely resorted to; and that more than 13,000 persons annually perish from disease, whose lives might, under the Divine blessing, be saved by efficient sanitary precautions. That this great sacrifice of human life is accompanied by an amount of physical degradation and mental depravity, which act as effective barriers to the inculcation either of social obligations or of Christian virtues.

4th. That the total want of efficient machinery wherewith to meet the recurrent ravages of Cholera and the constant devastations of Typhus, and other epidemic diseases, induced by the state of the dwellings of the poor and of the grave-yards, by the defective water-supply and drainage, by the overcrowding of houses, by the imperfect paving and cleansing of the streets and the non-removal of refuse, and by the prevalence of nuisances and of offensive and noxious trades and manufactures,—imperatively calls for legislative interference. This Meeting, therefore, considering the vastness of the evils sought to be remedied, the importance of the remedial measures contemplated, and the influence which the improvement of the Metropolis would exert throughout the British empire, resolves, that a Memorial be addressed to the General Board of Health, praying for its support and co-operation.

CORRESPONDENCE.

DR. PARIS AND MR. SYME.

[To the Editor of the Medical Times.]

Mr. Syme presents his compliments to the Editor of the *Medical Times*, and will feel obliged by his communicating the enclosed letters to the public.

Edinburgh, February 4.

DR. PARIS TO MR. SYME.

Sir,—In a pamphlet entitled "A Letter to the Lord Advocate of Scotland on Medical Reform," with your name appended as its author, I find the following passage:—

"It is not long ago since a College, which has been the loudest in its demands for exclusive privileges, had confided to it the bestowal of a large sum of money, as a reward for distinction in a field of literature cultivated by authors of the highest eminence, and yet, incredible as it may seem, the President, without any claim, except the joint authorship of an old nearly forgotten publication, appropriated this prize to himself, and the lawyer who had been his partner in the work. It is hardly necessary to remark, that a College which supported their President in, and identified themselves with, the perpetration of such an outrage on decency and propriety, could not be safely trusted with any power of controlling the members of a liberal profession."

Now, Sir, there can be no doubt you allude to the adjudication of the "Swiney Prize," by a joint-Committee of the Society of Arts and of the College of Physicians, and that, without the prudent precaution of an inquiry as to its truth, you have unscrupulously adopted, and transferred to your pages, the false and scandalous statement of an anonymous libeller, published through the medium of an English medical periodical.

Such is the grave charge reiterated against me in your "Letter on Medical Reform." I meet it with a flat denial. A sum of money, to the amount of 5,000*l.* was left to the Society of Arts, upon condition that once in every five years that Society should, in conjunction with Fellows of the College of Physicians, present to the Author of a published work on the subject of jurisprudence, a silver vase of the value of 100*l.*, containing a purse of the same value. I am not, nor ever was a member of the Society of Arts—the whole matter was settled by the Society of Arts and three Fellows of the College of Physicians, all College officers, in a Committee held at the room of the former Society, over the proceedings and decision of which Committee I had no control, either directly or indirectly. The position which you hold in the Profession and in Society, makes it an imperative duty upon me to require that you will make your retractation as public as you have made your unfounded statement.

I am, Sir, your humble servant,
(Signed) John Ayrton Paris.

To James Syme Esq., F.R.S.E.,
Professor of Clinical Surgery,
and President of the Royal
College of Surgeons of Edinburgh.

MR. SYME TO DR. PARIS.

Edinburgh, 4th Feb., 1850.

Sir,—I beg to acknowledge the receipt of your letter; and regret that absence from town yesterday in a distant part of the country, prevented me from replying to it immediately.

In referring to the "Swiney" affair in my letter to the Lord Advocate, which was published three months ago, I entertained the fullest persuasion, from your silence during the long period which had elapsed since the subject was dicussed in the Medical Journals, that you admitted the allegation in question to be substantially correct. This allegation being, that the prize had been bestowed through the agency of certain officials of the College of Physicians, and that your presidential influence had guided its direction.

This charge was not whispered or insinuated by "an anonymous libeller;" but was openly and repeatedly set forth in the leading Articles of a respectable Medical Journal, (the *London Medical Gazette*,) which has always been supposed to possess the confidence and support of the London Colleges. Having been thus established, and receiving no contradiction or explanation, it was, I believe, credited by every member of the Medical Profession, not excepting the Fellows of your own College, if I may judge from the correspondence which I have had with some of them in regard to it. In these circumstances, how it was possible for me to doubt the truth of the statement, and what steps you may have deemed it incumbent upon me to take for ascertaining its accuracy, I am altogether at a loss to imagine.

It now only remains for me to express the pleasure with which I have received your contradiction of the conduct imputed to you, and to assure you, that I shall be happy to use every proper means in my power to give it the most extensive publicity.

I am, Sir, your most obedient Servant,
(Signed) James Syme.

To Dr. Paris, President of the Royal College of Physicians of London.

DR. JENNER ON TYPHUS.

[To the Editor of the Medical Times.]

Sir,—Dr. Jenner's papers on "Typhus and other forms of Fever," lately published in the *Medical Times*, must be highly instructive to a large class of practitioners, and are extremely satisfactory, pointing out, as they do, the distinctive characters of the disease which alone deserves the name of Typhus.

To prevent, however, the impression which a remark he makes is calculated to produce, a few words from a quarter where typhus is at all times present, may not improperly be submitted to the readers of this publication.

Dr. Jenner, in closing his remarks on his 14th case, says, "I have never made an examination after death of a case of typhus fever, in which such appearances (inflammation) were present." I agree with him, and so will every one who has studied it so carefully as he seems to have done, that "the assertion that the symptoms of typhus fever are due to inflammation of the brain rests on as untenable grounds as that of the same disease in gastro-enteritis." Yet I cannot allow it to be supposed that inflammation of the brain and its membranes *never* occurs as a complication of typhus.

Congestion of the brain and its membranes has long been known to be of frequent occurrence in the course of this disease. An injected or unusually turgid state of the vessels within the head, especially of the pia mater and substance of the brain, with an increase of the natural serous exhalations on the different surfaces, particularly in the ventricles and beneath the arachnoid membrane, being probably the most frequent of the morbid appearances detected on examination of fatal cases.

During the life of the patients, the symptoms by which it is especially manifested are dingy redness and heat of the face and head, minute injection of the conjunctivæ, extreme stupor, aggravated muttering delirium, increased frequency and feebleness of the pulse, coldness of the extremities, clammy sweats, and a dark, dry tongue, which cannot be protruded. In short, cerebral congestion is indicated by the most highly developed state of typhus; and in most cases which terminate fatally, it is not till the supervention of these symptoms in their most aggravated form that the patients die.

Congestion of the parts within the cranium can scarcely then, as some are of opinion, be regarded as an accidental affection in typhus patients; but is probably to be considered as merely a consequence of the depressed state of the nervous system which is so characteristic of the disease. Indeed, in the experience of some observers, the symptoms of congestion have been so common, and have appeared in so early a period of the disease as to have imparted a peculiar character to it, and to have led them to describe such a fever under the distinctive name of "congestive typhus."

Several writers, however, have regarded the symptoms above enumerated as evidences, not of congestion, but of genuine inflammation; and some pathologists, observing their frequent occurrence, have been led to imagine, that fever consists essentially in inflammation of the cerebral membranes. But, undoubtedly, such a view is erroneous. Neither the phenomena observed during life, nor the appearances found on dissection, present anything which may not, with greater propriety be referred to congestion. It is true, that, during life, meningitis is manifested by symptoms in many respects similar, and may leave, after death, no morbid appearances besides congestions and serous effusions. But it is to be remarked, that in cases of typhus serous effusion is more commonly met with among those advanced in life than in young and previously vigorous subjects; while the opposite is the case in idiopathic inflammation of the meninges.

Besides the effusion in cases of typhus is generally less than in fatal cases of pure meningitis, whether acute or chronic. In the absence, then, of effusion of lymph, and other positive signs, we are not warranted in drawing, from serous effusions alone, any evidence as to the existence of inflammation; and I may add, in the words of a well known writer on this subject:—"Even where the symptoms are characteristic, and the diagnosis during life is shown to have been justified by unequivocal appearances after death, it may, in most cases, admit of doubt, whether the affection was ever anything more than a primary local inflammation.

We should, moreover, be impelled to doubt the accuracy of the observations they have made, when it is remembered, that the supporters of this doctrine of inflammation seem to be altogether ignorant of, or have paid no attention to the "rash," which is, indeed, the characteristic mark of typhus fever.

In cases where there can be no doubt of the fever being primary, and clearly referrible to contagion, the occurrence of well-marked inflammation within the head is extremely rare. Still cases do now and then occur in the practice of a large hospital; and should the subject seem likely to interest your readers, I will, with pleasure, submit one or two cases for their perusal.

I am, your obedient servant,
Glasgow, Jan. 26, 1850. James Stevens, M.D.

ABERDEEN DEGREES.

[To the Editor of the Medical Times.]

Mr. Editor,—The subject of Medical Reform has been so long before your readers that it is almost

becoming tiresome; yet, as it seems at length to be taken up by the non-professional press, I beg to send a copy of the *Aberdeen Herald*, of the 12th inst., to you, and at the same time request your earnest attention to the Editor's remarks on the Aberdeen system of doctor-dubbing. If you peruse them with care, you cannot fail to see an opinion indicated as to the *legality* of Universities conferring degrees on men who have not been educated within their walls. If it should turn out, as the able editor of the *Herald* seems to think, that such a practice is illegal, then this of itself will be a great and beneficial reform, without the aid of the Legislature. The question is certainly one very well worth putting to test in a court of law, as the practice in these rival Colleges has become a perfect scandal to the Profession. At the risk of becoming tedious, I will give one example of the *ready* manner in which an Aberdeen M.D.'ship may be got. A very short time ago a physician in England, who had charge of a small hospital, with a salary of 80*l.* or 100*l.*, took to wife a young lady possessed of 40,000 useful accomplishments, and took a marriage jaunt, which was so pleasant that he sent home his resignation, along with an intimation to his friends, that he did not intend resuming practice. Anxiety was now felt to have a man of some experience to settle in the place, and a gentleman of some local influence wrote to the north, asking a friend if he knew of any respectable medical man worthy of confidence, as they were afraid of some inexperienced persons settling among them. As a matter of course, the person written to thought his own attendant was the very man to suit, and made immediate intimation accordingly, with the necessary recommendations, to which a reply was sent, that although not *actually* indispensable, yet the gentleman ought to be possessed of an M.D. to insure success. This, however, he had not *at the time*, being only an M.R.C.S. He posted off immediately *en route* to England, *viâ* Aberdeen; left his own domicile on Wednesday per coach, arrived in Aberdeen the same evening late, and next day started by the mail for England, with the important two additional letters to his name. Unfortunately, it was known to the parties to whom he had letters of introduction that he was not an M.D. when they made their first inquiries, and when he produced his credentials they were perfectly thunderstruck, and whatever took place I know not further than the mere rumour, that this hasty-made ready document proved an insurmountable objection, and my colleague returned to his practice in this outlandish locality. There is nothing more common than for country surgeons attending the Circuit Court held half-yearly in Aberdeen, laying out their fees for professional attendance in any criminal case on the College vellum, and returning home veritable doctors, to the no small delight of their respective friends and supporters. What will your correspondent, who signs himself "M.D. Lond., M.R.C.S.," say to this? If he denies it, I will prove it.

I know for a fact, that a few months since two of these country Aberdonians, after grave consultation, actually tapped a married woman quick with child for dropsy. Not obtaining water the first time, they plunged the trocar deep enough next day to produce a quick delivery of twins, a few hours after the operation. We think nothing of these great feats in the far north. If they happened near you, they would be blazoned forth as something grand, and your correspondent, "M.D., Lond.," would no doubt challenge his particular friends, the Edinburgh M.D.'s, to attempt a like masterstroke of professional skill, betokening a degree of acuteness of observation by no means common. It is said there is no royal road to learning, but the Aberdeen Colleges have made a royal road to the highest honours given to men of learning, by their unjust rule, that all who possess a certificate to practise any department of the Profession, may at once appear before them on trial for their highest degrees. Now, Sir, it is well known, that however many classes the Colleges of of Surgeons may order candidates to attend, they have only authority to examine on two or three departments, and the students know this well. The public, however, do not; and it is a deception practised on the public by these Colleges, and the parties holding their licenses to set themselves up in all parts of the country as gentlemen (?) duly qualified and certified to practise every department of the Profession. To remedy this fraud nothing more is needed than a short Act, fixing a minimum curriculum and examination, to fit all who pass that examination for holding public Professional appointments of every description, as well as acting as Medical officers in the Army and Navy; the Act not to interfere with any of the existing licensing bodies, but leave them as they are, only declaring their parchment of no greater value than qualifying its holders to practise the departments they have been examined on. The immediate effects of this would be, that Graduates of London and Edinburgh, who require more surgery for their degrees than the Surgeons do for their license would be at once eligible for the Army and Navy without submitting, as at present, to a second examination before the Deacon and Box-master of the Edinburgh College of Surgeons, whose Charter really only extends to qualify for practice in four or five counties, or the London College, whose Charter is shifting almost every year. Students would cease asking for parchment which only qualified in part, and your obstinate College would soon be an institution resembling in some measure the Royal Society, whose Fellowship is only asked by, and conferred on, men of some note in the walks of science, and justly esteemed an honour. Begging again to refer you to the *Aberdeen Herald's* remarks on University Reform, and also to a consideration of the subject in the same paper of this day,

I ma, yours,

MORS.

Rottensloch, Jan. 26, 1850.

[We shall next week allude to the subject of our Correspondent's letter—ED. *Medical Times*.]

MEDICAL WITNESSES' REMUNERATION.

[To the Editor of the Medical Times.]

SIR,—The importance of the annexed Report to my professional brethren in Ireland (amongst whom your Journal has large circulation) dispenses with the necessity of an apology for occupying a portion of your columns.

It should be the duty of our Profession to hail with delight ever so small an acknowledgment of its rights and privileges; it should be also the duty of each member to communicate, with as little loss of time as may be, the happy tidings of even one step in the right direction by the "authorities," as affecting our interests.

Our British professional brethren may not be aware, that up to a very late period, we had been treated most unceremoniously by many of the public authorities, particularly at Quarter Session, which may be considered as district courts of assize on a small scale. A Medical witness was liable to be summoned to any court of session within the county, without any compensation whatever, either for loss of time or travelling expenses. In default of attendance he was liable to a fine, to be laid at any amount the court pleased, if the case was within the criminal jurisdiction; if in the "civil," to be limited to one pound, late Irish currency, or eighteen shillings and fivepence halfpenny of present or British currency. It was idle for the witness to complain of the hardship he endured by absence from his professional avocations, by which he might have sustained irreparable loss; the reply was, "I acknowledge your grievance, but I cannot remedy it. I have no power."

A few years ago (probably five), the authorities enabled the Crown Solicitor to pay Medical Witnesses summoned at his instance, one guinea in each case, but that is irrespective of the time he may be detained, or the distance he may have to travel. The witness for the Crown was so far protected: there was no protection whatever for the witness summoned by the Traverser, though he was equally liable to penalty as his more fortunate brother.

I am delighted to announce that the Rule I have now the pleasure of directing attention to, and pronounced, I believe, for the first time by any assistant barrister in Ireland, not alone places all Medical witnesses on the same level, but amply protects their rights for remuneration in civil as well as criminal proceedings.

It may be sarcastically asked, What did the witness gain in this case, as he was not paid or examined? He gained the only point he aimed at—*the assertion and acknowledgment of a highly important principle*, whereby, though *not then* paid for his loss of time, he secured ground of action for the recovery of his fee for attendance at Court, on a summons, no matter whether the attorney directing him to be summoned chooses to examine him or not. He can proceed for the sum he is entitled to, and, without doubt, obtain a decree for its payment. If, on any future occasion, a medical witness, on application for an order for remuneration for loss of time, may receive from the presiding barrister such a reply as, "I have no power; show me a precedent," let the answer be, "The rule made by Mr. Major, the Assistant-Barrister for the county of Clare, at the Kilrush Quarter Session for January, 1850, in the action of 'Dillon against Reidy.'"

I quote the Barrister's words:—"Your application is a very fair one. I do not see why you should not be paid; your time is as much lost to you here as at the assizes, and *whatever rule the Judges are in the habit of making for you, I will do the same.*" If the plaintiff's attorney thought he was saving his client the fees payable to the medical witness, by declining to examine him, a process for the amount would soon open the eyes of both parties.

I am, Sir, yours, &c.,

WILLIAM FOLEY, M.D.

Kilrush, January 27, 1850.

SUBSTITUTE FOR COD-LIVER OIL.

[To the Editor of the Medical Times.]

SIR,—Will you have the kindness to insert the following remarks upon the applicability of the common sweet almond oil (ol. amygdal. dulc.) to all cases in which cod liver oil is prescribed.

In a flat and damp agricultural district, where, amongst a certain class, inter-marriage is very frequent,—where intermittents, scrofula, and all kinds of disease, characterised by the presence of an adventitious product in the system are very common, and where, on account of scanty food and clothing, diseases are, generally, of an adynamic type, it is not to be wondered at that medicines, which enhance the nutritive powers, should be very largely prescribed.

We have always subscribed to that opinion, which denies the specific agency of the oleum jecoris in tuberculous and like diseases, and attributes the benefit conferred to its influence on the assimilative processes. We have prescribed the cod liver oil with great success, both in hospital and in general practice, and consider that its only drawbacks are its nauseous flavour and high price.

In June last, we agreed to prescribe a vegetable oil instead of the oleum jecoris, and our experience is highly favourable to the therapeutical virtues of the oleum amygdalæ; we have every reason to declare, that the almond oil and the cod's liver oil act precisely in the same manner, and that the first-mentioned oil has anything but a disagreeable taste, and can be obtained for at least one-third of the price of the best cod liver oil.

Our experience of the beneficial effects of almond oil has been derived from upwards of 250 well-observed cases; in no one case has it purged, and the contrary effect is very frequently produced. We are in the habit of prescribing the oil without any adjunct, at first, in ʒi doses, half an hour after every meal; the dose is gradually increased.

A drop of eau de cologne, or of some essential oil, renders the neat oil anything but disagreeable to the taste.

It is an excellent vehicle for the exhibition of iodine in small doses, the latter being triturated with a small quantity of olive oil, and then added to a larger amount of oleum amygdalæ.

The following—℞ Ol. amygdalæ, ʒss.; ol. olivæ, ʒii.; iodinii, gr. ¼. M. Cap. 1-3rd ter die., has been of great use in several syphilitic diseases of the bones and skin, in chronic pleurisy, and in many cases of chronic enlargement of the glands of the neck.

The influence of ʒss. of this almond oil taken daily, upon the weight of some patient's progressing in health under its exhibition, is very remarkable. In one case there was a weekly increase of 2lbs., in another of 4lbs.

Care must be taken to attend to the biliary secretion during the exhibition of the oil, which is contra-indicated, when there are evidences of symptoms of local congestion or of inflammation.

P. MARTIN DUNCAN, M.B., Lond.,
Physician to the Essex and Colchester Hospital.

ROGER S. NUNN,
Surgeon to the Essex and Colchester Hospital.

Colchester, Jan. 25, 1850.

WHY SHOULD COD-LIVER OIL BE THE ONLY OILY REMEDY IN CONSUMPTION?

[To the Editor of the Medical Times.]

Sir,—In the review of "Milner's Atlas of Physical Geography," in the *Medical Times* of February 2, allusion was made to the work of J. Forry, M.D., on "The Climate of the United States and its Endemic Influences;" and it was truly observed, that it appeared extravagant to recommend a journey to the Arctic Regions for the cure of phthisis pulmonalis; the ground of this recommendation being, that phthisis prevails least in the Arctic and Torrid Zones. Is not a hint to be gained from this in the

treatment of phthisis by cod liver, *and, perhaps, other oils or fats?* Fat, in the form of blubber, forms, as is well known, a great portion of the food of the Esquimaux. Does not this tell us, that as we advance towards the north, the non-azotized portion of food should be more of the oleaginous and less of the farinaceous kinds? Why should cod-liver oil be the only oily remedy in consumption? "Is bromine the active agent?" asks Dr. Pereira; and "as the oil contains iodine, and as it proves most successful in those maladies in which this element proves successful, it has been suggested that iodine is its active principle. Taufflied denies this, and asserts that the properties of the two are not identical, for the one succeeds where the other fails." I have not been able to find whether any trials of other oils or fats have been made in phthisis. Should it be found to be a *principle* in the treatment of this disease in our climate, that *more oily and less starchy foods must be used*, (the nitrogenous portion of the diet being supposed to remain the same,) it cannot easily be seen why other oily substitutes may not be found, whether among the animal or vegetable oils and fats—such as olive, almond, cocoa-nut, rape, palm, seal, train, spermaceti oils, &c. This suggestion can only be best put to the test in a hospital for the consumptive, where a number of trials and patients could afford sufficient data on which to form a correct opinion. Fat, says Ascherson, has the physiological power of coagulating albumen around it, the oil being, as it were, necessary "to forming the nucleoli of the primary cells of ordinary tissues." The importance of this, (if true,) in reference to the prevention or arrest of tubercular deposit, will be readily seen on considering in what tubercle differs from "ordinary tissue."

I remain, your obedient Servant,

F. W. P. Jago, M.B., London.

Lockyer-terrace, Plymouth,
February 4, 1850.

P.S. Analyses have been lately made of the cod-liver oil in America; and, in addition to the iodine, &c., (which is most abundant in the light-brown,) it is said to contain phosphorus,—another peg to hang a pretty theory on.

CAUTION

[To the Editor of the Medical Times.]

Sir,—It may be of service to my professional brethren of the Metropolis to caution them against a person who called at my house on Monday, the 4th inst., during my absence from home. Being admitted to the parlour, the servant was imprudent enough to leave him there alone, on the usual plea of writing a note to me. Having done so he retired, taking with him various little articles most convenient for removal.

By inserting this you will oblige

Your obedient Servant,

Thomas Lightfoot, M.D.

14, Keppel-street, Russell-square, Feb. 7, 1850.

(Copy of the note left.)

"Mr. W. M. Harris requests the favour of Dr. Lightfoot's attendance as soon as he can conveniently call, either to-morrow morning or afternoon."

HEALTH OF LONDON DURING THE WEEK ENDING FEB. 2.

The Register of Deaths for the past week exhibit an increase of 60 on those of the previous week, and likewise an increase of almost the same amount on the average of the corresponding weeks of the 10 previous years, (1840-9,) the mortality of these weeks having ranged from 780 deaths, in 1843, to 1478, in 1848. But if a correction is made for increase of population, the estimated average becomes 1126, and the deaths now returned are less than this number by 32. The causes of death prevailing at the present time, are found in by far the largest proportion in that class of diseases which affect the organs of respiration. In this class, of which the most important are phthisis, bronchitis, pneumonia, and asthma, there are now enumerated the deaths of 384 persons, or more than one-third of all who died in the week; the corrected average of 10 corresponding weeks is 376. On the other hand, the deaths from the zymotic or epidemic class of diseases were only 168, the corrected average being 216. A girl of 5 years died of "Asiatic cholera," after 14 hours' illness, in Portman-place, near the Edgeware-road; and in Fenchurch-street, a boy of 9 months died of "cholera, hooping-cough, teething, and convulsions," after a month's illness. Diarrhœa is the only epidemic which exceeds the average; it was fatal to 11 children and 10 adults; the average of this period is not more than 9; the fatality of measles is of the usual amount; and small-pox, scarlatina, hooping-cough, and typhus continue to show a decrease, which, however, is most considerable as regards the first two of these epidemics.

The mean daily reading of the barometer, at the Royal Observatory, Greenwich, was above 30in. on Sunday and Wednesday. The mean temperature rose from 33° on Sunday, to 44° on Tuesday, declined to about 36° on Wednesday and Thursday, and rose above 50° on Friday and Saturday. On Sunday and Wednesday, it was lower than the average of the same days in 7 years; and on Friday and Saturday, it was more than 15° above it.

The deaths in the several hospitals of London occurred as follow:—

Kensington House Asylum	0	St. Luke	0
Lock	0	City of London Lying-in	0
Consumption, Brompton	2	St. Bartholomew... ...	18
Munster-house Lun. ...	1	Miles' Lunatic Asylum...	2
Normand-house Lun. ...	0	Warburton's Lunatic Asylum	5
Otto-house Lun. ...	0	London	5
Brandenburgh-house Lunatic Asylum	0	Portuguese Jews' Hospital	0
Royal Military Asylum	0	Lunatic Asylum, Bow ...	2
Blacklands-house Lunatic Asylum	0	Guy's	9
St. George	4	St. Thomas	2
Coldstream Guards Hos.	1	Bethlem	5
Grenadier Guards' Hospital	0	St. Peter's Hospital ...	0
Westminster	4	Lunatic Asylum, Brixton	0
Charing-cross	0	Retreat Lunatic Asylum	0
Middlesex...	6	New County Lunatic Asylum	1
Queen Charlotte's Lying-in Hospital	2	Aged Pilgrim's Asylum	0
University College ...	0	Peckham House Lunatic Asylum	5
Small Pox	1	Camberwell House Lunatic Asylum	3
Royal Free Hospital ...	0	Dreadnought Ship ...	5
Fever Hospital	0	Devonshire Ship... ...	0
Northumberland-house Lunatic Asylum ...	0	Unité Hospital Ship ...	0
Invalid Asylum, Stoke Newington	0	Royal Ordnance	0
German Hospital... ...	1	Royal Hospital, Chelsea (South)	3
King's College	1	Royal Hospital, Greenwich (East)	7
French Hospital ...	1		

MORTALITY TABLE.

Deaths in the Week ending Saturday, Feb. 2, 1850.

(Metropolis.)

Causes of Death.	Total.	Average of Ten Weeks.
All Causes	1094	1031
Specified Causes	1082	1023
Zymotic (or Epidemic, Endemic, and Contagious) Diseases	168	198
Sporadic Diseases:		
Dropsy, Cancer and other Diseases of uncertain or variable seat	46	53
Tubercular Diseases	179	175
Diseases of the brain, Spinal Marrow, Nerves, and Senses	138	119
Diseases of the Heart and Blood-vessels	45	31
Diseases of the Lungs, and of the other Organs of Respiration	247	215
Diseases of the Stomach, Liver, and other Organs of Digestion	64	56
Diseases of the Kidneys, &c.	20	7
Childbirth, Diseases of the Uterus, &c.	9	10
Rheumatism, Diseases of the Bones, Joints &c.	9	7
Diseases of the Skin, Cellular Tissue, &c.	2	1
Malformations	1	3
Premature Birth and Debility	20	21
Atrophy	23	13
Age	68	75
Sudden	18	12
Violence, Privation, Cold, and Intemperance	25	21
Causes not Specified	12	8

The following is the number of Deaths occurring from some of the more important special causes:—

Apoplexy	31	Heart	39	Phthisis 137	
Bronchitis ...	126	Hooping-cough	33	Pneumonia ...	75
Cholera.....	2	Hydrocephalus	33	Scarlatina	13
Childbirth	7	Influenza	3	Small-pox	5
Convulsions...	30	Liver	8	Stomach	6
Diarrhœa	21	Lungs	6	Teething	16
Dropsy	23	Measles	22	Typhus	35
Erysipelas ...	10	Paralysis	34	Uterus	...

BIRTHS AND DEATHS.

	Births.	Deaths.	Births over Deaths.
Males	770	528	242
Females	718	566	152
Total.....	1488	1094	394

METEOROLOGY OF THE WEEK.

Day.	Mean of Barometer.	Mean of Thermometer. Dry.	Ditto. Dew Point.	Difference between the Mean Temperature of the day and the same day on an average of 7 years.	General Direction of Wind.	Amount of Horizontal Movement of the Air.	Rain in Inches.	Electricity.*
Sunday	30·352	33·2	26·4	3·7	P.M. S.	Miles. 190	0·00	P. and tension weak at 1 P.m.
					A.M. N.			
Monday	29·935	41·4	37·8	— 4·7	S.W.	230	0·01	Nothing shown.
Tuesday.....	29·890	43·8	39·4	+ 7·5	S.W.	110	0·16	P. and tension moderate after noon.
					N.			
Wednesday.	30·159	35·3	28·8	— 0·6	N.E. & E. E.N.E	40	0·09	P. and tension variable throughout the day.
Thursday ...	29·998	36·6	31·6	+ 2·1	E. S.E.	120	0·05	P. and tension moderate during the morning.
Friday	29·647	50·5	47·5	+ 15·2	S.W. S.W.	275	0·24	Nothing shown.
Saturday ...	29·669	51·9	49·2	+ 17·2	S.W. W.	390	0·01	Nothing shown.
Means ...	29·912	41·8	37·3	+ 6·1		SUM 1355	SUM 0·56	

* In this Column, A. stands for Active; N. for Negative; and P. for Positive.

MEDICAL NEWS.

Royal Society of Edinburgh.—Dr. Sheridan Muspratt, who has, on several occasions, furnished our journal with valuable scientific communications, has been unanimously elected a Fellow of this Society.

Naval Intelligence.—Assistant-Surgeon W. M'Dermott, M.D., (1840,) to the Blenheim, 46, steam guard-ship at Portsmouth. W. V. E. Reynolds, Acting Assistant-Surgeon since Jan. 27, 1849, to the Raleigh, confirmed. Alex. Mitchell, M.D. (1849), Surgeon to the Philomel, 8, sloop, at Devonport.

Obituary.—On Friday, the 1st, Mr. Duncan Fergusson, after a severe attack of typhus. This gentleman had only just finished his medical studies, and had lately held the office of Physician's Assistant at King's College Hospital, where he particularly distinguished himself by his unremitting and humane exertions amongst the numerous cholera patients under his charge. He exposed himself night and day, and escaped this dreadful malady, but too surely fell beneath the attack of that disease which has already consigned many of the best and bravest of our ranks to an untimely death.

Mr. Yearsley on Deafness.—The Academy of Medicine, at Paris, have named a Commission, consisting of MM. Laugier, Bégin, Boillarger, Guéneau de Mussy, et Piorry, to inquire into and report upon the merits of Mr. Yearsley's new made of treating deafness by the hydrated cotton, on which subject Mr. Yearsley had addressed a memoir to the Academy.

The Cholera.—We find it stated in the *Newcastle Guardian*, that cholera still continues to infest some of the colliery villages in South Durham. Seven deaths occurred in South Church last week from this disease, and three or four in Bishop Auckland.

Plymouth Naval Hospital.—A Court, composed of two admirals and one naval captain, was held at Plymouth, last week, to inquire into certain charges brought by the Captain-Superintendent of the Naval Hospital, against Dr. Rae and the naval officers of that establishment. The result, we believe, is still a profound secret; but the charges, so far as we can understand them, seem not to be of a very serious nature. It appears, that when cholera was prevalent in Plymouth, many cases were admitted into the hospital before the disease was fully de-

veloped. These were designated diarrhœa; but, on the occurrence of rice-water evacuations, with spasm and collapse, and, in some cases, death, the name was changed to cholera. This gave great offence to the Superintendent, who was determined that every case should retain the name given it by the officer who sent in the patient; consequently, two months after the disease had disappeared, he has accused the Medical officers of making out false returns, in order to enhance their reputations. Another charge was, that a case of cholera had been admitted late at night, and treated by an extra Naval Surgeon, specially appointed to take charge of cholera cases, without sending for the Inspector, who had left the Hospital, having previously directed that he was not to be sent for unless the surgeon deemed it necessary. This gentleman, it further appears, had three assistant-surgeons to aid him in the performance of his duties, one of whom was constantly in the cholera wards both day and night. The case, too, was a slight one, and the man soon recovered. These simple matters have been made by the Captain-Superintendent the basis of a serious charge against the medical officers of the hospital, necessitating the formation of a Board of Inquiry, and requiring the presence of Sir W. Burnett, the medical chief of the Navy, from London. We shall look with great anxiety for the decision of the Court on these knotty points, which, however, we have reason to believe, is adverse to the Superintendent. This gentleman should have borne in mind, that his duties do not require him to interfere with the medical department in any way. Why does he not remember the old adage, "Ne sutor ultra crepidam." Dr. Rae is one of the oldest and most respectable medical officers in the Navy, and there cannot be a doubt but that he will come out from this inquiry, not only cleared from the charges so invidiously brought against him, but fully justified in every step he has taken. We understand that Captain Toup Nicholas, the superintendent, has, since the above inquiry, been permitted to retire.

Westminster Medical Society.—The members of this Institution and their friends were most agreeably entertained by their worthy President, Mr. Hird, at a *conversazione* at the rooms of the Society in Saville-row, which were crowded by the *élite* of the Profession.

Royal College of Surgeons.—The Council have not been idle during the past week, on the all-engrossing affair of the new Charter. We understand they sat for three hours on Monday, and again on the following day.

Statistics of the Diplomas of London Physicians.—A Correspondent of the *Provincial Medical and Surgical Journal* gives the following Table as to the source whence the diplomas of London Physicians are derived.

Edinburgh	M.D.	.....	178
London	M.D. 36, M.B. 30	.....	66
Oxford	M.D. 24, M.B. 1	.....	25
Cambridge	M.D. 38, M.B. 8	.....	41
Dublin	M.D. 6, M.B. 5	.....	11
St. Andrews	M.D.	.....	68
Glasgow	M.D.	.....	35
Aberdeen	M.D.	.....	30
Paris	M.D.	.....	15
German	M.D.	.....	59
Various Continental Universities—Austria, Prussia, Italy, &c.	M.D.	.....	13
America and U.S...	M.D.	.....	6
Nondescript (*i. e.*, the degree being given without the University being mentioned	M.D. 6, M.B. 1	.....	7
	Total	.....	554

Middlesex Hospital.—Dr. A. P. Stewart has been elected the Assistant-Physician to this Hospital. There was not any opposition.

West Derby Board of Guardians.—The Board has considered a proposal laid before it, and has adopted the following recommendations:—a dispensary to be established for the township of Toxteth Park, a dispenser to be appointed at 75*l.* a year, and 10*l.* for an assistant. Districts 1, 2, 3, salary to the Medical Officers 60*l.*, instead of 80*l.*; District 4, salary 40*l.* instead of 80*l.* West Derby, municipal division, salary 80*l.* per annum, instead of 40*l.* This officer has for some time past had 12*s.* a week additional, so that his salary was 71*l.* 4*s.* annually. West Derby, rural, salary 50*l.*, as at present. Everton, salary 60*l.*, instead of 80*l.* The casting vote of the Chairman alone carried this last alteration. Kirkdale, salary 50*l.*, instead of 20*l.* This officer also had 12*s.* a week extra; his real salary, therefore, was 51*l.* 4*s.* Bootle, salary 20*l.* Allerton, salary 2*l.* 2*s.* instead of 5*l.* Garston, 15*l.* Childwall, 2*l.* 2*s.*. instead of 3*l.* 3*s.*

Gutta Percha Soles for Chilblains.—Dr. Turnbull has at length found a rival. The Gutta Percha Company addressed to him a letter upon the subject of his proposed remedy for chilblains—which we were not the only editors good-natured enough to publish. In reply, the doctor acknowledges, that all plans hitherto have been inferior to gutta percha soles for the prevention of the disease. After all, there is nothing like leather. By the way, why did not Dr. Turnbull, while he was about it, favour the *Provincial Medical and Surgical Journal* with a copy of his Letter on Chilblains?

Water Supply for London.—Our excellent contemporary, the *Weekly News*, remarks:—"We have more than once recurred to the danger we Londoners are exposed to of getting nothing to drink. There seems to be no doubt upon the minds of any who have turned their minds to the subject, that there is no deficiency of water in the immediate vicinity of the metropolis. But every one has a way of his own to get at the supply. Dr. Buckland puts an anathema on artesian wells, maintaining that the half dozen which exist suffice to drain the vast area of chalk which surrounds and underlies London. Two engineers, appointed to report on the Henley scheme, declare that the river cannot bear the drain which would be applied at that particular spot, if that company were, like Aaron's rod, to devour the other Companies, and furnish water only to the thirsty of this great City. A third scheme is now broached, founded upon experiments made pursuant to an order of the House of Lords in 1840. Mr. R. Paten, to whom this order was addressed, sank a well in the chalk formation in Bushey Meadows, near Waterford, and, it seems, met with an abundant supply of water at a depth of 34 feet. On boring to the further depth of 130 feet, four holes of small calibre yielded a supply of 1,800,000 gallons per day of twenty-four hours. These experiments were conducted under the inspection of Mr. R. Stephenson, who reported on the results to a company then projected, and which it is intended to revive. Our object in recapitulating these facts is to show, that a mere theoretical opinion, such as has been pronounced by the Dean of Westminster, might be of weight where no practical arguments could be opposed to it. But the learned Dean would, doubtless, himself be the first to acknowledge, that the best-founded theories are constantly modified and corrected by the results of experiments; and, in the case of scrutinizing the nature and extent of a subterranean water-basin, whatever theory might do towards estimating its probable position and character, yet nothing short of actual experiment could furnish convincing details upon which to work. The Bushey experiment is highly valuable as tending to show, that the water supply is locally different. It appears to be very various at various depths in the same locality. Upon this head we recommend Mr. Homersham's (C.E.) Report, which is published as a pamphlet, with two beautiful maps; and do not doubt that all who peruse it will not only share our opinion, that the few wells already sunk to any considerable depth in London and its vicinity are altogether insufficient to test the nature and extent of the subterraneous channels which perforate the vast chalk bed below and around us. There exists, therefore, both a motive, and, on Mr. Homersham's and Mr. Stephenson's showing, full encouragement likewise, to pursue the researches which have often been proposed into the receptacle which is at our command. The parishes of London have now taken up the matter, and we have faith in any effort which they seriously make. No greater boon can be bestowed upon both rich and poor, than means of cleanliness. A supply of clean water will prove as useful as good means of getting rid of it when it has been used; and the success which will infallibly attend a well-judged effort for obtaining a pure supply may excite to an attempt to regulate the discharge of the foul water. Until the parishes themselves take it up, it is useless to expect that anything effectual will be done in either direction."

Suicide of Mr. Rouse.—We regret to state, that the decease of Mr. Rouse, surgeon, of Fulham, announced in our last, was an act of suicide. He destroyed himself by taking prussic acid. When discovered, it is presumed, he had been dead many hours. Mr. Rouse had been very actively engaged during the late cholera epidemic, and subsequently drew up a valuable Report on the sanitary condition of Fulham.

TO CORRESPONDENTS.

"Mr. Morris's Case of Morbus Coxarius" has been transferred, without acknowledgment, from the "Medical Times," of January 19, to the "Provincial Medical and Surgical Journal," of February 6, under the head of "Original Communications." The usages of respectable journalism might have induced the editor of the "Provincial Journal" to acknowledge the source from whence the case in question was obtained. We are unwilling to suppose Mr. Morris would imitate certain advertising quacks, and send his case to more than one medical journal.

Communications from Mr. Maybury, Little Tower-street; Mr. Barrow, 19th Regiment; Mr. Osborn, Southampton; Dr. Hastings, Stokenchurch; Chirurgicus, and others, will receive early insertion. We are not in the habit of gazetting the receipt of communications proceeding from all the letters of the alphabet and something more. We have neither time nor space for such *ad captandum* exhibitions. When we do not acknowledge the receipt of papers, it is because we have handed them over to the printer to appear, in due course, in our Journal.

Our anxiety to complete, for the benefit of our readers, the admirable papers of Dr. John Taylor, on Pericarditis, and the length and importance of the report of the interview of the Committee of the Poor-law Convention, on behalf of the Union Surgeons, with Mr. Baines, oblige us unwillingly to omit this week our usual Edinburgh correspondence, our Selections from Foreign Journals, and Reports from the London Hospitals. We much regret that we are also obliged to omit, until next week, a memoir of the late Mr. Clift, and Dr. Jenner's paper on Typhus Fever. Several correspondents, also, must accept our apologies, and their letters stand over until our next.

A Correspondent, in answer to Quæso, of December 12th, says:—"I should say he would be justified in accepting 4*s.* per annum per member; for this sum he could do full justice to the members, without damaging his standing in the profession; in Leeds the usual fee is 2*s.* 6*d* per annum per member, and this pittance is accepted by Fellows of the College, as well as M.R.C.'s, L.A.C.'s, &c."

"J. B." writes:—"Studens wishes to be informed what books he can read to ward off infidelity while dissecting. Let him read Genesis xv. 13—16, and learn in Joshua whether that prophecy was fulfilled. Let him read the promises made to the Jews if they obeyed the Lord their God, and their punishments if they forsook Him. In this case, they were no longer to have a king, or country, or nation, but to be dispersed among all nations—despised, neglected, persecuted, &c. &c. And have we not now this day before our eyes, the fulfilment of this wonderful prediction, made nearly 3,000 years ago? Know we of any nation or country in the which, and among the which, they are not dispersed? and are they not a marked and peculiar people? The same God who foretold these events has also said, 'At the last day all shall stand before Him in judgment—those that have done well shall go into everlasting happiness, and those who have not believed, into everlasting condemnation.' Sir, let Studens read and compare the Old and New Testament—let him read Keith's book on the Prophecies,—and lastly, let him learn from his present studies and pursuits, that none but God could have made man so 'wonderfully and fearfully,' any more than a watch or steam-engine could have been made by chance."

"Mr. Ogilvie, of Ridgway-house Asylum," has written us, complaining of injustice done him in our Article of Jan. 26. From the general tenor of his communication, we would readily have inserted it, but its enormous length utterly precludes our doing so. We strongly recommend Mr. Ogilvie to publish the paper in the form of a pamphlet, when, if a copy be sent us, it shall receive due attention in our Review department. Meanwhile, we quote the closing paragraph of his justification, convinced that we should only be doing Mr. Ogilvie injustice by curtailing the details of his communication:—

"Having the satisfaction of my own conscience, the assurance of satisfaction and goodwill on the part of all my poor patients, who have thus been driven, in almost every instance to their own regret, from my care,—the unanimous thanks, sympathy, and regret of their friends, and the condolence of my own friends and my former patients—several of whom have written to express their astonishment, that I, who have so carefully eschewed all the evils and abuses incident to such establishments, should have been singled out and held up to the world as an example of such abuses;—with this consciousness and such testimonials as these, I take leave to say, I would not exchange my position or my feelings for those of Mr. Purnell, prosperous as he may be, successful in his schemes, and flattered by the support and suffrages of his sycophants and admirers, and of all who, from prejudice or supineness, have degraded themselves so far as to give their sanction to his proceedings,—coupled as all this must be with his own consciousness of the unworthy motives that have actuated him, and the unjustifiable nature of the measures he has adopted."

"N.P."—We regret that our space will not this week allow us to publish a much shorter, though still too lengthy letter upon the same subject, from "A Physician and Resident Proprietor."

"Un Chirurgeon."—A private letter has been waiting for our Correspondent at our office. It would have been forwarded by post, but his address has been unfortunately mislaid.

"Mr. Wardrop's Work on the Heart."—We received a communication from the Author, on the 6th instant, to the effect, that he was bestowing all the time and attention he could give to the subject; and we hope, therefore, soon to present our readers with the remaining portion.

THE HUNTERIAN ORATION.

DELIVERED IN THE THEATRE OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND,
ON THURSDAY, FEB. 14, 1850,
BY

FREDERICK CARPENTER SKEY, ESQ., F.R.S.,
Lecturer on Anatomy, and Assistant-Surgeon to St. Bartholomew's Hospital.

(Reported by our own Short-hand Writer.)

MR. PRESIDENT, AND GENTLEMEN,—We are assembled on this occasion to do honour to the genius of Hunter,—a name celebrated throughout the civilised world, and also to record the merits of those who, deceased since our last anniversary, have claims on the respectful remembrance of their brethren. The period of Mr. Hunter has formed an epoch in the history of Medical science. His unceasing ardour, his spirit of investigation, and his intellectual greatness, demand the homage of our veneration, and in the search of science leave competition far behind. In the range of modern physiological science, no one has approached his eminence or participated in his glory. No thought of private interest, no aspirations after fame, no ambition after distinctions, could divert his mind from the pursuit of truth and the investigation of nature and her laws. On the almost untrodden ground of his researches, his mind revelled in the luxuriance of intellectual riches. That his mind was imbued with the very spirit of earnest inquiry, his gigantic productions will testify to;—that his researches were conceived and carried out by superior intelligence, I point to the philosophy of his written works. It was said of Bacon by Ben Jonson, that his words were so full of meaning, his hearers could not look aside from him without loss; and even so did Hunter's reflecting mind teem with originality of conception. He winged his way from the infancy to the mature age of science, discovering and maturing every subject that engaged his fixed attention. His intellect has been the frequent theme of eulogium in this theatre, and upon which my numerous predecessors have expatiated with eloquence. Combined with his intellect, were also certain moral qualities, which equally demand our praise, while they fortify our convictions of his claims to the gratitude and admiration of posterity. Ingenuous, disinterested, unreserved, in communicating knowledge, he exhibited many of the excellencies of the true philosopher. He surveyed, as from an eminence, the great book of Nature, and his thoughts expanded by a natural elasticity, as he became elevated above the grovelling influences of the world. To a love of Nature, he added, a still stronger love of truth. It is impossible to read of him, without believing that to the ardour and enthusiasm which incited him to toil over the great field of Nature, he added an undeviating adherence to truth. A spirit of arrogance, and a disposition to depreciate the works of a rival, is the characteristic of the pretender to science, while they expose the motives which carry him forward in its pursuit. And the cause is plain; for, if animated by a true love of science, any contribution to his favourite study is hailed with gladness; whereas, it would be received by the empiric with coldness, and, perhaps, disapprobation. How often does the desire of distinction dictate our efforts, and produce envy. In the great temple of knowledge there should be no contentions for place,—a spirit of fraternity should prevail. Every degrading thought and passion should be thrown aside, as derogatory and injurious. Between two students of Nature there are no motives for rivalship or ill-will. They are directed by one common and high motive, and have no time to step out of the direct path of inquiry to indulge angry passions or to question motives. Their eyes are fixed on one object, and, to reach this goal, they pursue their course in a straightforward direction. The excellence of Hunter is to be looked for in his untiring efforts to advance the cause of physiological science,—his untiring industry,—his indifference to the acquisition of riches, and in the benevolence of his nature, which ever identified itself with suffering, and which inspired feelings of love in the breasts of all his friends. (Mr. Skey here quoted an autograph letter of Mr. Hunter's, written in 1786, to the Master, Wardens, and Court of Assistants of the Corporation of Surgeons, giving evidence of his desire to extend the advantages of medical literature to all.) The Orator then proceeded to notice several of the celebrated links which connected Hunter with the Medical Profession, and first noticed the name of William Clift, whose name, he said, next to its great founder, was more fully identified with the Hunterian Museum than that of any other man living or dead. The Memoir of this gentleman has so recently appeared in our columns, and is again more fully referred to in another part of our present Number, that we feel it unnecessary further to report that part of the Oration.

Mr. Charles Aston Key was next referred to, as a name identified with the highest class of scientific surgery. Mr. Key was appointed one of the chief surgeons to Guy's in 1824, which office he held to his death, or twenty-five years. Mr. Skey characterised him as possessed of a mind in which a refined common sense was the most striking feature. His knowledge was his own. He studied disease at the most advantageous place—the bedside of the patient. He evinced a deep interest in the cultivation of Professional knowledge. Possessed of a remarkably cool judgment, a general inquiry into cases did not satisfy him; he pursued his investigations into every detail. He aspired only to that level which would subserve the treatment of disease. During nineteen years, he met a large class of Medical students, instructing them in his favourite subject, the principles and practice of surgery. Mr. Skey then eulogised him as a surgical writer, especially on the subject of lithotrity; while he observed, with some regret, on his rather eccentric opinions as to food and diet. He died of cholera in its worst form, in the 57th year of his age, regretted by the whole Professional body.

Mr. John Goldwyer Andrews and Mr. Thomas Morton next came under review, the latter being characterized as distinguished by an ardent love of his profession, and the accuracy of his observations. Certain changes occurring in University College, produced an impression, that he was deprived of the prospect of further advancement, and in despair, and by his own hand, he sought relief from his suffering in his 37th year, leaving with his contemporaries the reputation of a talented surgeon, and with his friends the memory of a kind and amiable man.

Mr. Pennington was noticed by the orator as a man unknown as a writer, and unconnected with public professional life, but pursuing a career of almost unexampled activity in the department of private practice. He never sullied his integrity by a single ungenerous or sordid act during a long life of unexampled professional activity, and died in March last, in his 85th year.

Mr. Skey then proceeded—From the earliest period of the world, the science of medicine has been esteemed one of the noblest occupations; and it would be difficult to find one more adapted to inspire the mind with ardour, or to kindle the energies of thought. The study of physiology, whether applied to the structure of the body, or to the attempt to explore the mysterious agent of life,—the study of those phenomena which characterise the local or general defects in the body,—the study of psychology, demanding the highest order of intellect,—the discovery of agents obtained from the vegetable, animal, and mineral kingdoms,—the researches of the chemist, whose operations are connected with almost every branch of medical science,—we can hardly point to one department that is not, in a greater or less degree, necessary to the service of medicine,—these are among the occupations of medical men, and they blend into the wider circles, both of philosophy and science, for here there is no boundary to the scope of study. Nor are his moral requisites less indispensable. The practitioner in rural districts is a member of each social circle. To him the father resigns the health of his family; he is admitted at all times and in all seasons; and here he may exercise even a parental authority. He thus becomes an adviser and a friend, and acquires extensive rights and peculiar privileges. The path to medical knowledge, also, is dangerous, and its requirements are often repugnant to delicacy. It involves intercourse from which the senses will often revolt. Often the Medical Man pursues his labours, unchequered by recreation for a single day, in companionship with sorrow, disease, and death; and while his family seek the repose which Nature demands, he is, perhaps, summoned to a distant village to minister to the relief of incurable disease, and devoting to reflection those hours in which he should invigorate his mind and body for the duties of the morrow. For the influence of such occupations on his health, I refer to the bills of mortality, which show that he too often sinks into an early grave. Mr. Skey considered that this condition was altogether unmerited, and continued:—With large resources, the Profession of Medicine is at the present time a degenerate science. The rank of a select few may yet remain, but the Profession has ceased to be sustained to the level of its real value by the voice of the public. The causes for this are various, but I conceive the greatest of all to be, the *want of education*. It is mind that does the great work of the world. He who would study man in his mental and physical condition must cultivate an acquaint- with the writers of antiquity. He will take nothing upon trust, but will trace the stream of knowledge to its source. The language of ancient Rome is that of the great Congress of Medicine. It is the language of Celsus, and the adopted language of Haller and Boerhaave. Its cultivation is more indispensable to Medicine than to any other department of science. Yet, for all this, the excessive cultivation of *classical* knowledge generates a learned folly, disqualifying its possessor for the acquisition of that knowledge which is necessary for our intercourse with the world. No man is fitted for the task of education whose mind is not stored with *general* knowledge. Another important branch of study is that of the *exact sciences*. It is thus that we learn to compare and analyse, and then to expose the fallacies under which false reasoning lurks. Logic is also an important source of discipline, invigorating the faculties by its application both to the right interpretation of terms, and to the higher purposes of abstract reasoning. To the neglect of these it was to be attributed, that the Science of Medicine was degraded; and the Orator considered, that unless some measures were adopted by our Colleges, requiring education in these branches as necessary for qualification, the entire removal of all other causes combined would fail to remedy the evils existing. Mr. Skey then observed, with much point and some severity, upon the prevalent system of education, so called, by means of apprenticeship,

exhausting, as he said, four or more invaluable years of the early life of the student. After characterising and somewhat satirizing this system, to which, he observed, the Profession had lent itself, in opposition to the laws of moral right and of common sense, he said: This (the age of his apprenticeship) is the spring of his existence, and the only season in which the mind takes impressions for a whole life. The child is said to be "father to the man." I have sketched his education, look at the result. The giant evil of the day was a want of education, while all should be educated in mind and manners up to the level of good society; and he rejoiced to think that the Council of the College had acknowledged the necessity by taking the initiative here, by instituting examinations in classical and mathematical knowledge from all junior candidates for the rank of Fellow.

Another cause of the degradation before-mentioned, was founded on the degenerate standard of Medical Ethics. Taking the body corporate of the Profession, we find a want of that high tone which distinguishes other professions. There is no profession, the conventional refinements of which are more stringent than in the higher departments of the law, —that being a purely artificial pursuit. In the abstract, law is an inflexible and impartial principle, devised by sages to protect society against selfishness and power, and no principle is more deserving the veneration of the world; while, by the progress of knowledge and civilization, medicine, having enlarged the circle of its utility, has become degenerate in rank; that law has gained an ascendancy in proportion as it has lost its early simplicity. The instrument has become a machine, ponderous and unwieldy, and has ceased to be the tribunal of impartial justice; and in the same degree have the conventional laws of its professors, their learning and education obtained an ascendancy in the world immeasurably superior to those of medicine,—the estimate of truth receding in value in proportion as the world advances in civilisation. The profession of the law at the present day exhibits as great a prostitution of intellect as was ever imposed on the human understanding; and it is impossible for the mind, imbued with a love of truth, to witness the mock display of gladiatorial talent shown in our Courts of Law without regretting that there the highest intellectual powers are enlisted in the cause of moral degradation, and either indulge a smile of contempt, or shed a tear with the philosopher of Ephesus over the vices of a redundant civilization. It is matter for rejoicing, that the mind and the habits of the Medical man are differently constituted,—with truth as his field of action, good his aim, and the world his study. The duties of the Profession of Medicine have a tendency to keep alive the best emotions, and a warm sympathy with the sufferings of humanity. Still the practice of the law is regulated by a sense of decorum and even of refinement, which in a far less degree are practised by the Medical Profession.

In the next place, *the state of the law* has an important influence in depressing the rank of the Profession of Medicine. On this point Mr. Skey remarked, that the general Practitioner was an amphibious link between a profession and a trade, and, in its exercise, the law awards him a tardy, and perhaps questionable remuneration—a system fraught with the greatest evils both to the Profession and to society. The law awarding payment for physic only, the doctor disposes of as large a quantity as is consistent with the capabilities of his patient. The question is, how much of this physic will repay the daily loss of time of the medical man; while, in many cases, it is difficult for him to be remunerated but by actual dishonesty. If the law does not award legitimate compensation, he is driven to an excuse for subjecting his patient to a course of physic, with a view to prevent a recurrence of the malady. The objections to all this cannot be overcharged. It is inseparably interwoven with the rank of our Profession, our characters, and the well-being of society. It upholds the doctrine, that Medicine is the great antidote against disease,—inviting empiricism, and weakening the allegiance of our Profession to Nature as the author of disease and the worker of its treatment: we thus forget the operation of first causes, in our reliance on second, and strike a fatal blow at the rank and respectability of our Profession. The placing a pecuniary value on the drugs dispensed, is a feature most injurious to the rank of the General Practitioner; and with quite as much reason might the Surgeon claim compensation in the name of the instruments he uses. Medicines should not be dispensed at their adventitious value. The whole Profession should cry aloud and repudiate a practice so derogatory and vicious, and obtain from the Legislature a title to a remuneration more consistent with their services and their high calling. Mr. Skey next observed upon the ambition to acquire rank as an incentive to attaining superiority of mind; but it was a stimulus, he said, far less available, on many grounds, to the Professors of Medicine, than to any of the other professions. He would lay claim for eminent superiority, and for some Order of Merit to be granted by Government, to such as distinguished themselves in Medical Science.

In the removal of Professional evils, society would not render aid, unless the Profession itself rooted them out—purging themselves of the imputation of littleness, and throwing themselves on the highest resources of their Art. Pointing to the grandest discoveries in general science, or to the deductions of the profoundest philosophers and mathematicians, Mr. Skey said, that in the limited circle of our own Profession we may boast names and discoveries not inferior, and which greatly exceed them in their intrinsic value, if gauged by their subserviency to the happiness of mankind; and in justification of this statement, the speaker noticed, in succession, many points in which the study of Medicine had proved, in the hands of some of its ornaments, the handmaid to health and happiness;—discoveries worthy of any age or any science, and benefiting alike the peasant and the king. In considering the remuneration of our Profession, he did not lose sight of the fact, that the necessities of society increase in proportion to its inability to compensate us,—that poverty is the very nursery of disease, and that in Hospitals, Dispensaries, or in Unions, a large portion of our time is devoted to the relief of human suffering. We may justly boast of our noble hospitals and infirmaries, erected by the benevolence of private individuals. The practice of charity is stamped upon the national character. In the Hospitals of the Metropolis about 300,000 persons annually obtain relief from suffering. But what would these endowments be but for the active agency of our Profession? The Medical mind infuses a spirit of life into the otherwise inanimate body, and is thus the instrument of incalculable good to thousands—the pride of virtue, and the boast of the world. Without doubt, the motives dictating these services are composite in their nature; still, the world is our debtor, and we feel that we have some claim for an honorary distinction. The Sovereign encircles the warrior's brow with the victorious wreath; his bruised arms are hung up as monuments of glory; and it is perhaps natural, that the Professors of Medicine, devoted to the purpose of extending human existence, should pass unrewarded; while it is almost singular, that this fact should escape the propounder of the Malthusian doctrine.

In alluding to the impracticability of extending the advantages of education to the present generation of practitioners, Mr. Skey said: Thus far the evil is irremediable; but much good may be effected by the agency of a refining spirit, employed for the purpose of rooting out the vulgarisms in conduct that unhappily prevail in our Profession. A better spirit should be infused into our vocation; one which will tend to avert those evils of conduct between man and man, founded on questions of mere profit and loss. To this end, he would suggest the cultivation of a more refined taste,—the power of appreciating beauty in any form. Good taste and good feeling are found in daily companionship; while, without it, a blank is left in the circle of man's enjoyments, and his intellectual framework is incomplete. The study of the beautiful forms one of the most elegant resources of our minds. It embraces a wide range of human knowledge, from its primitive form to the highest manifestations of refined and cultivated taste in the poet or the painter. Such objects are within the range of every man's observation. A country life especially furnishes materials for the development of thought, while objects of beauty are calculated to take men out of the sphere of personal occupation, and to direct their thoughts to objects which tend to calm and elevate the mind. Who can behold (said the speaker) the gorgeous drapery of a golden sunset, or the variegated colours decomposed by the common prism, without pleasure? Who can be indifferent to the delicate tracery of masses of ferns, of heaths, or to the grandeur of the sturdy oak, the graceful sweep of the willow, or the light pencilling of the ash,—the undulations of distant hills, or the more sublime form of ponderous clouds against the blue sky, or, as they may be, fringed with light reflected from the sun,—or the broad expanse of the boundless ocean?—the relish for such enjoyment has a tendency to adorn the acquisitions of the student, and he may be said to breathe a new existence in the novel associations of every day and hour. The aptitude for such studies is possessed in various degrees of perfection by different individuals; but the germ is in all, and, by early cultivation, it may be made to perceive and enjoy the highest artistic powers, from the simple beauty of an arabesque, to the sublimity of genius exhibited in the Theseus and other adornments of the great temple of Athens. The study of the sublimity of art must always exercise a refining influence over the character; and that man was to be pitied who could see unmoved the marbles of Nineveh, without attaching to them a sacred character, forming, as they do, the great link of evidence of the Biblical history of a former world. A man's taste for what is elegant and his right moral conduct, are one and the same sense, operating on the same subject,—a love of beauty and propriety, extended to all intellectual exhibitions. What (said Mr. Skey, in conclusion) are the requisites of your Profession? Tested by the claims of other Professions, could it be said that our duties demand a lower standard of moral excellence,—are we content with mediocrity? Or, rather, does any pursuit demand a higher order of intellect, a deeper fund of moral courage, a greater boldness in action? The medical man is, under Providence, the arbiter of human life. "Ars corporis curandi tuendique, atque utilitas Deorum immortalium, inventioni est consecrata." A pursuit which, in its very infancy, was esteemed so great as to claim descent from the gods, and is so interwoven with the welfare of every member of society, and on which even our national

character depends, and no less our scientific rank, merits the highest attention of the Legislature, and demands for it the most vigilant observance and exposition of its defects, and the co-operation of all who desire to promote the welfare of this great nation throughout the globe.

ORIGINAL CONTRIBUTIONS.

TYPHUS FEVER, TYPHOID FEVER, RELAPSING FEVER, AND FEBRICULA,

THE DISEASES COMMONLY CONFOUNDED UNDER THE TERM

CONTINUED FEVER.

ILLUSTRATED BY CASES COLLECTED AT THE BED-SIDE.

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[(Continued from page 18.)

DURATION.

As some difference exists in the statements of writers respecting the duration of typhus fever, and as the bearing of the question on the non-identity of typhus and typhoid fever is of importance, I shall offer a few remarks, and detail some cases, which may serve to illustrate, in a measure, the cause of this discrepancy.

The analogy between typhus fever and other diseases, such as scarlet fever and measles, which have their origin in specific causes, and are accompanied by a rash, would lead us to suppose, that the former, like the latter, might possibly have a determinate duration. Experience proves that it has such limited duration. It is invariably an acute disease; and by no peculiarity of individual or external conditions can it become chronic.

What do we mean by the duration of typhus fever? How is that duration to be ascertained?

In determining the duration of those specific diseases with which typhus fever must be grouped *i.e.* scarlet fever and measles, observers have been led to take the day of the disappearance of the rash as that of the cessation of the disease, and to class together the morbid phenomena, which arise subsequently, under the name of sequelæ. But the primary affections may have local diseases of serious import, not constituting an integral part of themselves, set up in their progress. These local diseases are called complications. Now, a complication may be very severe when the primary affection is of little moment, and may continue, or even increase in severity, after the primary affection has run its course. The patient may die of pneumonia, or of tuberculosis a month or six weeks after the commencement of measles, there having been no cessation in the severity of the general febrile symptoms from the outset of the illness.

But we should never think of maintaining, that the measles continued in this particular case for six weeks. All we could affirm would be, that the local complication set up during the progress of the measles continued after the termination of the latter, and so prolonged the illness. Take another case,—one of rubeola *sine catarrho*, or a very mild case of scarlatina simplex; the patient suffers more or less general distress; an eruption appears, and he forthwith declares, that he has nothing the matter with him. I have just left a man, suffering from scarlatina, with difficulty restrained from following his ordinary employment, and a physician of the very highest authority on the subject of scarlet fever, informed me of a case in which a gentleman applied to him to be examined for the purpose of assuring his life, and who, when his life was refused on the ground that he was at that moment suffering from scarlet fever, expressed his astonishment at the information, stating, that he felt perfectly well. A physician would consider such a man to be labouring under scarlet fever till the rash disappeared. We may briefly express the matter thus:—So long as the eruption continues, the disease of which it is the diagnostic character exists. The disappearance of the rash, in uncomplicated cases, indicates the termination of the specific disease.

There are two very opposite circumstances under the influence of which the date of the first appearance of the eruption is changed, and its duration shortened.

1st. A very mild attack of the specific disease.

2nd. The development of severe local complications in the course of the specific disease.

The normal duration of the eruption, and consequently of the disease, of the existence of which the latter is the index, is only to be determined from well developed uncomplicated cases.

Corroborative evidence may be obtained from the examination after death of fatal cases; thus, if a person dies while suffering from scarlet fever, an examination after death may demonstrate no lesion to account for the fatal termination. We consider the individual to have died, in such a case, from the direct action of the poison on the blood or nervous system; this absence of local lesion, experience proves only to be observed in cases fatal within a limited period from the outset of the illness; if the patient dies after that period has elapsed, experience proves that local lesions are invariably found sufficient to account for death.

All this is equally true of typhus fever.

Case 19.—Sudden headache—pain in the limbs—rigors—loss of strength—epistaxis—mulberry rash—quick pulse—bowels regular—dry brown tongue—slight somnolence—disappearance of the eruption on the 14th day of disease—recovery.

Bartholemew H., aged 17.—The brother of J. H. (See case 3.) A moderately stout, fair, well made youth, by trade a baker, was admitted into the London Fever Hospital under the care of Dr. Tweedie, Nov. 3, 1848. He always enjoyed health till his present illness; but had been subject to very frequent attacks of epistaxis. Having passed a good night, Thursday, October 26th, he awoke on the morning of the 27th with headache, pain in the limbs, slight rigors, and sense of chilliness, followed by heat and sweating; the rigors, &c., were repeated frequently up to the date of his admission; his bowels acted regularly from the outset, and there was no vomiting. He had taken some aperient medicine before he entered the hospital; he kept his bed from the first day; his nose had bled two or three times.

The following note of his condition was taken November 4th, *i. e.*:—

The 9th day of disease. Severe general headache; the pain being occasionally of a shooting character; little sleep; very restless at night; expression heavy; mental powers dull; no delirium; muddy hue of face; no flush; some dusky-red mottling of the face; pupils normal; conjunctivæ slightly more vascular than natural; humming noise in the ears, and unpleasant taste in the mouth; no affection of vision; vertigo in the erect position. He can leave his bed unassisted, so as to reach a close-stool adjoining, but with considerable difficulty; lips dry; sordes on the teeth; tongue dry pale brown centre, red border; three watery stools; slight tenderness at the epigastrium; no fulness nor increased resonance of abdomen; pulse 120; no abnormal physical chest signs; no cough; skin hot, dry, spotted; spots numerous, dusky pink, irregular in shape; the majority with ill-defined outline; some round; the large majority not elevated; fade only on pressure; a few slightly elevated, disappear on pressure; a few spots on the face; no miliary vesicles.

The spots, which on admission disappeared on pressure, faded only on pressure on the 11th day of disease; the eruption grew more dusky in hue on the 12th; on the 13th it was unchanged in character, and began to grow paler on the 14th day; the tongue continued brown and dry till the 13th day, when it was noted to be moist and loaded, yet there was a little desire for food on the 12th day. The pulse gradually fell from the date of his admission; thus, on the 11th and 12th days it was 100; on the 13th and 14th days, 96; and on the 15th day, when the next and last note was taken, it was only 72. With the exception of mental dullness, some want of sleep till the 11th day, and then trifling somnolence for twenty-four hours, there were no symptoms referrible to the head.

The epistaxis had probably no relation to the fever, as the lad frequently suffered when in ordinary health from bleeding from the nose.

The youth who formed the subject of this case was the brother of J. H., see case 3. The identity of the eruption in the two is obvious. They both had well-marked mulberry rash; the disease in both was tolerably severe, and uncomplicated; its duration was nearly the same in the two cases, viz., thirteen and fourteen days. These two brothers had probably been exposed to the same specific cause.

Case 20.—Sudden headache, vertigo, and sense of weakness—trifling rigors—confined bowels—mulberry rash—quick pulse—loss of sleep—fall in the pulse—delirium—somnolence—recovery.

John M., aged 24, a man of sober habits, who before his present attack had suffered much from want, slept in union-house, &c., by trade a type-founder, was admitted into the London Fever Hospital under the care of Dr. Tweedie, May 8th, 1848. His previous health had been, with the exception of occasional catarrhs, good. On 2nd of May he was seized with a sense of general weakness, frontal headache, and vertigo. On the 5th he took to his bed in consequence of increased sense of weakness; slight shivering occurred on the 6th and 7th. He lost his appetite, suffered from thirst and confined bowels from the outset.

On the 9th of May, *i. e.*, the 8th day of disease, the following particulars were noted:—He slept well last night; there is no headache; slight heaviness of expression; injection of conjunctivæ; occasional singing in the ears; other senses normal; mind unaffected.

Though weak, he is able to leave his bed to reach the close-stool without assistance; movements and position in bed unconstrained.

Tongue moist, furred posteriorly; no appetite; some thirst; five stools; some gurgling in the right iliac fossa; no abnormal fulness nor tenderness of the abdomen.

Pulse 108; heart and breath sounds healthy.

Skin hot and dry; trunk and extremities covered with eruption; the spots are irregular in outline, of a dusky red colour, darker on the posterior surface of the trunk than on the anterior; some fade only, others disappear on pressure; no sudamina.

During the night he became very delirious, left his bed several times to wander about; had no sleep. On the following day he was still delirious; his conjunctivæ were injected, and he complained spontaneously of headache. The tongue, though moist, was brown; his bowels acted twice, and he vomited frequently and copiously, some green fluid; there was no tenderness of the abdomen; the pulse was 120; the eruption little changed in appearance. His head was now shaved, and cold applied. Some simple saline, effervescing mixture, with four drops of hydrocyanic acid was administered every six hours, and 4oz. of wine ordered to be given in divided doses during the succeeding 24 hours.

On the next day, that is, the 10th of disease, he was reported to have slept some hours at the early part of the evening. After waking, he attempted frequently to quit his bed. He was delirious at the time of the visit. He asserted that he had no headache. His conjunctivæ were still injected. The vomiting ceased the evening before; in other respects he was as on the 9th day; the spots, which disappeared on pressure when he first came under observation, *now only faded;* that is, grew paler on pressure. On the 11th day, somnolence commenced. He was still delirious when awake, but made no effort to leave his bed. On the 12th day his state was nearly the same; the pulse continued 120 and weak; the wine was increased to 6oz. in the 24 hours.

From this time his pulse began to fall. On the 13th day it was 108; the 14th, 100; the 15th, 84; 16th, 80; 18th, 66; 20th, 60. His tongue became moist on the 19th day; the bowels were regular or confined. On the 16th day there was slight deafness. The spots were much paler on the 17th day than they had been before that date. Delirium continued till the 19th day; the somnolence, which had disappeared, increased on the 18th day; and on the 19th he slept almost constantly night and day. His appetite began to return on the 21st day, and at the same time his pulse rose to 72.

This was a well-marked case of rather severe typhus fever. Some of the spots still disappeared on pressure, when J. M. was first seen, *i. e.*, on the 9th day of disease; but, in the course of the disease, they passed into what I have previously described as their second stage. They began to grow paler on the 18th day of disease. There were two symptoms, usually termed "head symptoms," present in this case, which call for remark.

1st. The continuance of the headache complained of spontaneously, after the commencement of delirium. This combination of symptoms is generally of very important and grave import, indicative of increased vascular action within the cranium. It serves to separate meningitis from fever with sym-

ptomatic headache. In this case, however, the continuance of the headache appeared to be sympathetic, or dependent on the state of the stomach and liver. It disappeared when the vomiting ceased. The cessation of the vomiting, and the consequent disappearance of the headache, was probably due rather to the wine than to the hydrocyanic acid. Vomiting in typhus fever, unaccompanied by tenderness at the epigastrium, often ceases at once on the administration of stimulants. Louis, speaking of headache in typhoid fever, says, that its cessation, when delirium or somnolence supervened, could not be attributed, in all cases, to the imperfect perception of the patients, because they often complained of pain in other parts of the body when they declared they had no headache. This is true of typhus fever, and I may remark, that, on the first commencement of the delirium, the patient, while declaring he had at that moment no pain in the head, will add, but "I have had terrible headache." The truth of Louis's remark is confirmed by the fact, that in meningitis, the patient will complain bitterly of headache while talking in other respects, most incoherently.

2nd. The continuance of the delirium after the fall in the pulse, and general improvement in other respects. This symptom is not a very frequent one. When present the delirium generally disappears after a profound sleep. Like some of the cases previously detailed, this man became deaf about the termination of the second week.

Case 21.—Trifling sense of illness for a fortnight —sudden debility—rigors on 5th day—headache—disturbance of mental functions, at first confusion only, then delirium—mulberry-rash on 7th day——somnolence—heaviness of expression—muddy hue of face—tongue dry, brown, and finally black—confined bowels—fulness and tenderness of abdomen—rapid pulse—extreme prostration—death on the 20th day—non-granular consolidation of the most depending part of the lungs—increased vascularity of the lining membrane of the urinary bladder—other organs normal.

Mary H., aged 44. A stout, dark-complexioned woman; a widow, the mother of three children, the youngest twelve years old, all living. Her mother died when very young Her father aged 70 "of old age;" a native of London; of sober habits; night-nurse at the London Fever Hospital.

Previous Health.—She stated, that, although not very strong, she generally enjoyed health; ceased to menstruate at forty-two. She was once, many years since, confined to her bed, in consequence of an injury to her back, and once since that time from "lumbago." The other nurses stated, that she had, during her residence in the Hospital, frequently complained of pain in the back, and was in the habit of sleeping with a pillow under her loins. Seven years since was cupped in consequence of headache, to which she is subject. She suffers, more or less constantly, from cough, accompanied with expectoration.

Present Attack.—On the evening of August 22nd, 1849, she was exposed to wet; from that time she felt slightly unwell, though unable to state any particular symptoms. Her bowels were regular, and she had no headache. On Monday, Sept. 6, she felt decidedly worse, and during the night was too ill to assist the patients even to a little water, although she still sat up. At this time she had neither headache, vertigo, singing in the ears, nor epistaxis, her bowels were confined. On Sept. 7th she took to her bed, on the 8th had an emetic of ipecacuanha, which produced copious vomiting of bitter fluid, and acted on her bowels. On the 11th she had some rigors, for the first time. In addition to the emetic, she had taken before I saw her some simple saline effervescing mixture, *i. e.*, sodæ sesquicarb. and acid. tart. When she came under observation, Sept. 12th, *i. e.*, the *seventh day of disease*, the symptoms were as follows:—Decumbency dorsal, unconstrained; twice during the night of the 11th she left her bed unassisted, but was, at the time these notes were taken, quite unable to assist herself on to the close-stool, or even to sit up in bed unsupported. There had been no delirium, and she answered questions rationally, but her memory was rather defective, and her mind generally rather dull. She had had some sleep the preceding night, undisturbed by dreams. There was a little frontal headache; the conjunctivæ were slightly injected, the pupils normal in appearance; there was no deafness, singing in the ears, nor vertigo; the cheeks were flushed; the expression was slightly anxious; the tongue, dry and cracked in the centre, was moist at the edges; the abdomen was full and resonant, there was no tenderness nor gurgling; there had been two or three relaxed stools during the preceding twenty-four hours, from a dose of castor oil; there was no appetite, some thirst.

The pulse was 110, and possessed some power; the respiration was 40 in the minute, quick and short; there was a little cough, and some sonorous and sibilous râles over the whole chest; the percussion note was normal, and there were no abnormal heart sounds.

The skin was hot, dry, and spotted; the spots were rather numerous, of a dull pink hue; on the abdomen and chest were many a quarter of an inch in diameter, slightly elevated, but flat on the surface; their shape was somewhat irregular; they were effaceable on pressure, but resumed their previous appearance when the pressure was removed; on the arms were some very small, half a line in diameter, and not elevated; there was no eruption to be seen yesterday.

On the *9th day of disease*, the slight anxiety in the expression, observable on the 7th, had disappeared, and was replaced by a dull, heavy aspect. The conjunctivæ were still more injected, and the eruption, which disappeared under the finger on the 7th day, now only faded on pressure; that is to say, the spots grew paler, but could not be effaced; five grains of sesquicarbonate of ammonia every six hours were substituted for the tartrate of soda. In the evening she became very delirious, and continued so at intervals till the termination of the disease. On the *10th day* the headache had disappeared, nor did it return; the flush of the cheeks was purplish. The debility was so great that she could not turn in bed, and had to be lifted out when the bed was made. On the parietes of the abdomen were two bright purple spots, round, not elevated, and unaffected by pressure, *i. e.*, petechiæ. The pulse was now 130; the bowels relaxed, *i. e.*, three or four relaxed stools were passed daily. On the *11th day* somnolence commenced; and, for the first time, there was slight tenderness of the abdomen, and the following note respecting the spots was made:—"The centres of some spots are unaffected by pressure the circumferences of which fade, *i. e.*, grow paler on pressure. Other spots are less affected by pressure than before." On the next day the urine and stools were passed into bed unconsciously. The prostration became extreme; her conjunctivæ still more injected; she dozed almost constantly; the dusky or muddy hue of the face grew daily more intense; the tenderness of the abdomen more decided, and especially marked in the hypogastric region. From the 16th day of disease till her death on the 20th day the urine had to be removed by catheter; its quantity varied from two to three pints daily; it was acid, and contained a few crystals of uric acid; its specific gravity was 1016.

On the 16th day she lay on her back immoveable constantly sleeping, (said, when roused, that she felt much better;) her mouth open; cheeks sunken; tongue dry, baked, black; her bowels were confined, and she took 3 drs. of castor-oil. On the 18th day there was muttering delirium when aroused, and she generally lay in a semi-comatose state. The pulse had risen to 150, and was very feeble. There was abundant mucous râle over the anterior surface of the chest. She was too prostrate to be raised for the purpose of examining the back.

She died on the 20th day of the disease.

4 oz. of wine were given on the 11th day, and increased to 6 oz. on the 14th day. A pint of porter was added on the 15th day. On the 16th, 2 pints of porter, 8 oz. of wine, and 1 oz. of brandy were administered.

The examination of the body of M. H: was made 50½ hours after death; the weather was cool; cadaveric rigidity was well marked; there was no appearance of decomposition, and no emaciation. There was 1½ in. of fat on the abdominal parietes. On the anterior surface of the trunk, the spots marked during life by ink, to indicate that they faded or grew paler, without being obliterated on pressure, were still visible as pale reddish-brown stains; of those marked in such a manner as to indicate that the circumference faded, while the centre was unaffected by pressure, the latter part retained the appearance it presented during life; the former resembled the pale reddish-brown stains above described; while the spots which, during life, were entirely unaffected by pressure, *i. e.*, the petechiæ, preserved the characters described as belonging to them before death. The traces of the spots were much more distinct on the inferior than the superior portion of the lateral regions of the trunk; while on the back they were of a deep purple colour.

Head.—There was a little colourless serosity at the base of the brain, and in the lateral ventricles; slight congestion of the vessels of the *pia mater*; and a few more red points than usual in the *white substance.* The consistence of the organ was normal throughout.

The *larynx and trachea* were healthy in all particulars.

Right lung.—There were no adhesions and no fluid in the pleura. The most depending part of the posterior portion of the organ was dark red, flabby; contained much thick dark bloody serosity, and little air; sank in water; broke down rather too readily under the finger. This abnormal condition extended about 1 in. into the substance of the lung.

Left lung.—The pulmonary and costal pleura were firmly united throughout their whole extent by old adhesions. The morbid appearances resembled those described in the opposite lung, but were rather more extensive.

The *bronchial tubes* contained much frothy mucous, and their lining membrane was rather more vascular than usual.

The *pericardium*, which contained about one ounce of transparent yellow serosity, was healthy.

The *heart* was somewhat flabby, but otherwise normal. It contained a little semi-fluid dark blood, frothy from the admixture of air, probably introduced in the act of opening the organ; large dark coagula in both auricles and in the large veins at the root of the heart, and large fibrinous coagula extending from the ventricles into the aorta and pulmonary artery. The descending aorta contained much fluid and dark semi-coagulated blood.

The *œsophagus* and *pharynx* were healthy.

The *stomach* was normal in all particulars, excepting some minute injection of the cardiac extremity. The *large* and *small intestines* contained much flatus. Their mucous membrane was pale throughout; its consistence and thickness being perfectly natural. *Peyer's patches* were found with difficulty.

There was no enlargement of the *mesenteric glands.*

The *liver* was flabby, and somewhat softer than natural; otherwise normal.

The *gall-bladder* contained from 2 to 3 oz. of pale thin bile, and a large number of small gall-stones (cholesterine with nuclei of inspissated bile); its lining membrane was normal.

Pancreas healthy.

The *spleen* weighed only 5¼ oz. It was flabby, but did not break down with abnormal facility; its colour was natural.

The *kidneys* were large, but healthy.

Urinary bladder.—There was minute capillary injection of the whole lining of this organ, especially intense on its anterior surface.

The *uterus* and *ovaries* were not removed; they appeared as seen *in situ* healthy.

The reader's attention is especially directed to the progress of the spots in this case; their three stages; the continuance of the same spot, from its first appearance till the termination of the disease in death; and, finally, the persistence of the spots after death. In order to direct attention to the same spot during its varying phases before and after death, a circle of ink thus O was placed around several when first seen, *i.e.*, when they disappeared on pressure; this mark was changed into a diamond thus ◇ when the spots faded only on pressure; this diamond was surrounded by a square, thus ⧈ when the centre was unaffected by pressure, and the circumference faded; while a simple square, thus □ indicated the spots unaffected by pressure. Without some such contrivance it is impossible to feel confident, that the same spot is observed on succeeding days, or that particular spots persist after death. The tenderness of the hypogastric region was explained by the condition of the bladder. The abnormal vascularity of that organ could not have been due to the retention of urine, because that symptom did not appear till the 15th or 16th day of disease, while the tenderness was first noted on the 11th day. The urine, it may be remarked, was, as it usually is in typhus fever, quite as abundant as in health, and acid. The presence of a deposit of uric acid is worthy of note. Its specific gravity was rather, but not abnormally, low. The sonorous and sibilous râles were probably proper to the chronic bronchitis from which this woman appeared to have suffered before her attack of fever. Peyer's patches and the mesenteric glands were, as they *always are* in fever, accompanied by the mulberry rash, perfectly healthy, and the whole gastro-intestinal mucous

membrane in a state that completely excluded the idea of this having been, in any sense of the word, a case of gastro-enteritis. It is not usual for the cadaveric rigidity to be well marked, so many hours after death from typhus fever.

The lesion of the lungs was that which is so frequently found after death from typhus fever, *i.e.*, non-granular consolidation of their most depending parts. That accidental position is the determining cause of the consolidation appears to be proved by the fact, that the solidification, unless it involves some depth of the pulmonary tissue, is limited to the most depending part of the inferior lobe; the extreme apex, base, and root of the lung still remaining crepitant; *i. e.*, the consolidated part lies in the hollow formed by the fourth, fifth, and sixth ribs, between their tubercles and angles; that it is not due to cadaveric congestion is proved by the frequency with which physical signs indicative of its existence can be detected during life.

Death in this case could not be ascribed to the condition of the lungs; the lesion of those organs was too slight, and of too small an extent, to account for the fatal termination. In fact, there was no lesion revealed by the scalpel which could be regarded as the cause of death. It is not common for patients to survive till the 20th day of typhus fever, and then exhibit so little local morbid change after death.

The lengthened duration of the disease, conjoined with the total absence of anything approaching to a lesion of Peyer's patches is important, for certain German writers have asserted, that the cause of Peyer's patches being unaffected in typhus fever with exanthematous rash, is the early period of the disease at which such cases prove fatal—signifying that time sufficient for the deposit in those organs does not elapse between the commencement of the disease and death. Now, as I have said, this case did not prove fatal till the 20th day of disease, (Cases 5, 8, and 22 survived the 20th day,) and there was no deposit in the glands, while I shall have hereafter to refer to a case of typhoid fever in which the deposit was very abundant on the fourth day of disease,(a) and others which proved fatal, with very extensive ulceration, long befor the termination of the third week. These cases, in conjunction with the one I am here considering, and Cases 5, 8, and 22, which survived the 20th day of disease, appear to me conclusive against the argument adduced in support of the identity of typhus and typhoid fevers, founded on the assumption that nature does not allow time enough before death for the deposit to take place in the agminated and mesenteric glands in the latter disease.

[To be continued.]

SURGERY OF THE LATE WAR IN HUNGARY.

By Dr. GLÜCK, Surgeon-in-Chief to the Hungarian Hussars.

(Continued from page 76.)

Of medicaments, we had at all times enough, with the exception of quina, which was very much used in Hungary, but of which we were sometimes in want; we then employed tinct. lobeliæ with great benefit.

INSTRUMENTS.

From May, 1848, to October, of the same year, we were very well furnished with all kinds of instruments, which we obtained from France and Austria. After the boundary had been closed, however, the raised army were deficient, but this deficiency was in some measure supplied by those made at Pesth, and later at Nagy-várad. After having taken Pesth and Buda, we were supplied by instrument-makers, who provided themselves from France and Vienna. Besides the usual instruments for amputation, and various sorts of forceps for extracting balls, I used, with some modification, those invented by Balassa, and in many hundred cases with great success. A handle like a pair of scissors; blades half round; the flat surfaces closing upon one another, with extremities rough, like a pair of dissecting forceps.

WOUNDS.

Incised wounds occurred very often among the men of the Hungarian, Russian, and Austrian armies. No one part of the body could be excepted, where these, superficial or deep, did not occur.

On July 11, 1849, a Honved, 19 years of age, of the 45th Foot, was brought into the Hospital of Passa, after the battle of Czorna, whose left thigh, along the vastus externus muscle, was incised from the trochanter major to the knee-joint. This wound, half an inch in depth, was made by the lance of an Uhlen. After suffering from the wound during five days, he was attacked by cholera, and died.

After the battle of Teth, a Cuirassier was brought into hospital, with an incised wound across the back, more than half an inch in depth; a suture was applied to bring the parts together. In longitudinal superficial wounds, even an inch in depth, union was accomplished with the greatest celerity, the blood itself quite plainly the first bond of union.

A Hussar, who wore his dressings all through the battle of Czorna, (11th July, 1847,) was brought into Hospital with thirteen incised wounds, made by three Cuirassiers, who set on him; his continued movement during the encounter explained the cause of the wounds on each side. He received two cuts between the shoulder bones; two between the fifth and sixth ribs of the right side; two on the exterior of the thigh of the left side; and another along the inferior part of the vastus externus of the right. The only application was cold water, and a few plaister strips, removed after three days; all his wounds were healed on the sixth. It was generally sufficient to bring the wounds together, and to sustain them *in situ* with strips of plaister, that were never renewed. In deep transverse wounds of the upper and back part of the thigh we could most readily bring together the divided surfaces by bending the limb; at the fore part, of course, by extending it. The chief difficulty lay in approximating the edges of wounds when they occurred on both sides; in these even sutures were of little benefit, and union by the first intention almost impossible.

The 30th December, 1848.—Going to Pesth, I met on the road a body of recruits, joining headquarters. Having followed them a quarter of an hour, I got off my horse to walk, it being extremely cold; suddenly one of them, having had a dispute with his comrade, took out of his boot a huge Bursch knife (an instrument not unknown in Germany) and made a cut at him; a transverse wound through the deltoid ensued: the intense cold prevented my sewing it up; plaisters were applied as well as could be accomplished, and in nine days it was perfectly healed.

In the battle of Hatran, (April 6, 1849,) I had to attend many Cuirassiers who were wounded by our Nicolaus hussars. The right shoulder of one young cuirassier had a long transverse wound, and another along the outside of the fore-arm. Having tied the brachialis, I tried to sew the edges; but the loss of blood was considerable, and, during a hasty retreat, he died.

In *incised* wounds, made by sharp sabres, the hæmorrhage was very great; but they healed sooner than contused or punctured wounds, in which there was little bleeding. Incised wounds of the scalp, if no remarkable contusion was present, wanted little but proper adhesive dressings. The incised wounds of the Honveds, who wore hats, or a sort of round bonnet, and those of the huge helmeted cuirassiers, differed in this particular, that those of the latter did not heal so soon, because almost always accompanied by contusion from the pressure of the weighty helmet. It occurred very often, as at Altenburgh, that the cuirassiers fell down dead from simple concussion of the brain caused by the mere blow of the sabre. Among the Uhlans, again, whose heads were defended by a slight helmet, besides mere incised wounds, I often met dreadful cases where the scalp was cut away, and slices of the diploe of the bone,—the mode of fighting was from one side to another,—so that large portions were often taken away.

Immediately after the battle of Thaz, a Uhlan, only 22 years of age, was brought to Passa, both his parietal bones cut clean away by a sharp sabre; one hanging still by a piece of muscle! At the battle of Teth, a soldier, 32 years of age, got three incised cuts on the head, which, forming a triangle, left a piece of bone separated from the rest of the skull—insulated, as it were; it was quite moveable, and seen to rise with the pulse of the middle meningeal artery. The brain escaped, as if by miracle! and he was well in nine weeks.

Incised wounds seemed to heal sooner in winter than during the summer. If I hazarded an explanation, it would be, perhaps, that in the former season, after the retraction of the bleeding vessels, a proper coagulum was at once formed, which afforded a bond of union. Not so in summer; the general relaxation of the entire system prevented the healthy process by the "first intention." If large vessels were injured, it was the best mode of proceeding to take them up at once, even if it was necessary to make a wound higher up to tie them. Continued pressure, indeed, on the vessel, during a couple of hours, sufficed to stop the hæmorrhage in many cases. At the battle of Hatven, a Cuirassier arrived at the hospital, whose left shoulder was opened at the joints by a sabre. He was lying in the same wagon with five dead soldiers, one of whom, as it happened, lying and pressing heavily on the trachial artery, prevented hæmorrhage. The moment he was removed from the wagon, however, fatal hæmorrhage set in.

(To be continued.)

(a) The preparation of the intestine of this patient was submitted to the Pathological Society by my friend, Mr. W. H. O. Sankey, M.B. I was present at the examination after death, but am indebted to him for the particulars of the case. The patient was under the care of Dr. Tweedie. I have this week examined the intestines of a subject, dead from typhoid fever, which exhibited extensive deposit in Peyer's patches on about the 10th day of disease.

DEATH BY TAKING OXALIC ACID;

DETECTION OF IT IN THE HEART; SMALL PORTION OF FREE ACID IN THE CONTENTS OF THE STOMACH.

By H. OSBORN, Southampton.

A few weeks since a woman, about 20 years of age, residing in this town, determined to destroy herself by taking oxalic acid. It appeared, from the evidence, that death took place about twenty minutes or half an hour after sending for the poison, and before medical assistance was procured.

Mr. Ware, a surgeon, being sent for, performed a *post-mortem* examination, by the request of the Coroner, about forty hours after death. On opening the stomach, this gentleman found about three ounces of dark-coloured matter, resembling coffee grounds, and the coats of the stomach and duodenum were highly reddened from congested blood. The mucous membrane of the stomach was softened, and broke up with the slightest friction. From these appearances, Mr. Ware requested me to analyse for the suspected poison. I first tested the contents of the stomach with litmus paper, when I was surprised to find only a trace of acid re-action, the paper remaining in contact several seconds before it became reddened. As far as could be ascertained, there had been no vomiting, except a little frothy matter which exuded from the mouth, consequently, the whole of the poison could not have escaped by this means, and if vomiting had taken place immediately after taking the poison, life would probably have been saved, or, at least, prolonged. I suspected, at first, that the acid might have combined with some alkali, or alkaline earth, but a further investigation did not appear to show that much, if any was neutralised, and no antidote had been administered. On boiling the contents in distilled water, the litmus paper became immediately reddened, and the filtered liquid gave a small precipitation, with a solution of sulphate of lime presenting the appearance of oxalate of lime, insoluble in acetic acid, soluble in nitric acid. A solution of sulphate of copper produced a turbid appearance and no precipitation until after evaporation, when a heavy powder was deposited of a blueish or greenish white colour. The upper layer of the precipitate contained organic matter, which was poured off, and the residue well washed with distilled water, until all soluble matter was removed. The suspected oxalate of copper thus obtained was diffused in distilled water, and sulphur-

etted hydrogen passed through the liquid until the gas ceased to be absorbed. After separating the sulphuret of copper by filtration, the liquid required evaporation and a second filtration, when it became colourless and acid. On applying the three tests, sulphate of lime precipitated oxalate of lime; sulphate of copper, the greenish-white oxalate; and nitrate of silver, a white precipitate which fulminated when dried.

The precipitate obtained by lead was decomposed with hydrosulphate of ammonia, but, owing to the presence of animal matter, the solution was not so readily obtained in a state of purity, from the application of the tests.

A portion of the stomach, intestine, and contents were boiled in a solution of carbonate of potash to remove any of the acid existing in an insoluble state. The filtrate was saturated with nitric acid, filtered and treated with solutions of acetate of lead and copper; the precipitate obtained by the former was decomposed with sulphuric acid, and the latter with sulphuretted hydrogen, but the quantity of acid extracted by the potash did not exceed that which was obtained by boiling in distilled water, consequently, an insoluble oxalate could not have existed. A piece of the stomach, after being washed and boiled in the solution of potash, and treated as before, gave a trace of the acid.

The heart was lastly examined, but this organ was not removed for chemical inquiry; it appeared quite healthy, and, after being washed, was cut in small pieces, boiled for some time in carbonate of potash water, and, when treated as before, gave the same turbid appearance with solution of sulphate of copper, and a precipitation on evaporation. The oxalic acid was ultimately extracted in a pure and crystallised state in a watch glass, and, when redissolved, produced the characteristic precipitate above described. In some cases of poisoning with oxalic acid, the blood has been found free from the poison, but the blood, in this case, was not kept for examinaton.

The chief object in publishing this case of poisoning is to show, that death may be caused by oxalic acid and its presence be too small to be detected without minute investigation, owing to absorption, or other causes. Had the quantity been estimated it would only have amounted to a few grains in the whole. There was, however, every proof of the acid being taken as far as circumstantial evidence could testify; not only was the possession of it traced to the deceased, but a witness proved that an attempt had been made the same afternoon to drink a solution of the poison in question. The finding of a small portion of the poison, together with *post-mortem* appearances, should at all times be sufficient evidence to account for death, although, I believe counsel sometimes require the chemist to discover the quantity required to cause death, and thus to frustrate the ends of justice.

HOSPITAL REPORTS.

ST. BARTHOLOMEW'S HOSPITAL.

CONCUSSION FOLLOWING A BLOW ON HEAD

SYMPTOMS OF COMPRESSION SUPERVENING AFTER THREE HOURS — TREPHINING — DEATH — POST-MORTEM APPEARANCES.

— Hedges, a strong, lusty-looking man, aged 75, was admitted under Mr. Lloyd into Colston Ward, Jan. 29, 1850, having been knocked down by a cab half-an-hour previously. When brought to the Hospital he appeared as one that was recovering from concussion; attempted to get off the stretcher—busied himself unnecessarily about his stick and shoes—and insisted upon being allowed to sit up on a chair. Pulse somewhat accelerated; left pupil contracted, the right dilated. After having been in bed a short time, he rallied from these symptoms in a measure, and gave his name and address accurately; but about two, p.m. (three hours after the accident), another train of symptoms supervened; his breathing became stertorous; there was total insensibility, with loss of motion on both sides, the muscles on the left side of the face appearing more lax and flabby than on the right; the pupils in the same state as before, the irides acting sluggishly; pulse 70, large and labouring. The scalp felt puffed and doughy on the occiput and right side, with very great swelling over the right temporal muscle; and immediately behind the right parietal eminence was observed a contused patch, of the size of a half-crown.

As death seemed inevitable if no operative measures were undertaken, Mr. Lloyd, with the concurrence of Mr. Wormald, at once proceeded to make an incision through the contused patch of integuments, exposing the bone denuded of its pericranium. Posterior to the parietal protuberance there was found the termination of a fissure through which blood was constantly oozing, and which was traced forwards sinking towards the base of the skull, in front of the zygoma. The fissure itself was, in many parts, so wide as to admit the finger-nail, and in its course were presented one or two irregularities, like spiculæ of bone. The tissues around were loaded with extravasated blood, but the pericranium was detached only opposite the external bruise, and as there *only* was blood oozing, it was chosen as the proper place for the application of the trephine.

A piece of bone of the size of a shilling was taken out, its circumference bordering the fissure, and the brain, deprived of its dura mater, was exposed to view. Upon making gentle pressure with the finger, a small quantity of half-coagulated blood came out, and the same resulted from a repetition of the pressure, till at length the brain, which previously felt tense and resistant, became much less so; but the more to facilitate the escape of blood, a triangular piece of bone was taken away by means of Hey's saw (the fracture forming one side of the triangle and the anterior margin of the circular opening another side) by which means exit was given to three or four ounces of semi-fluid blood—the blood welling out each time pressure was made on the brain.

The pulse which, previous to the operation, had become very small, seemed to recover itself, becoming more frequent and soft, and the breathing less stertorous; but no material relief was obtained, and, as there exuded with the blood, masses like broke-up brain, it was suspected that more mischief had accrued than mere extravasation. The pupils remained the same; breathing more stertorous; circulation failed, and at nine p.m. he died.

Sectio cadaveris fifteen hours after death.—The fracture extended from behind the parietal eminence forwards in a groove formed by one of the principal branches of the arteria meningea media, towards the zygomatic fossa, and ending in the greater ala of the splenoid bone near to its root. Dura matter lacerated at the part corresponding to the separation of the pericranium externally, with great effusion of blood on the right side, between the brain and dura mater, chiefly in the anterior and middle fossæ; also on the outer surface of right hemisphere. The substance of the brain seemed firm and healthy, except opposite the seat of the chief hæmorrhage, where it was extensively softened and broken down.

Remarks.—This case presents us with a well-marked example of a definite class of cases of injury to the head, in which an improvement in the circulation, and a return to consciousness, are the harbingers of symptoms, sealing, but too surely, the fate of the unfortunate sufferer. As to the propriety of an operation, it appeared that there was a chance, however unpromising, of relieving the compression; and the evident external contusion, the separation of the pericranium, and the escape of blood from one part of the fracture, all pointing to one spot, left but little room to hesitate in the choice of a part at which to open the skull.

STRANGULATED FEMORAL HERNIA REDUCED ON THE SIXTH DAY.

PERITONITIS WITH GREAT PROSTRATION—OPERATION AND DEATH.

A tolerably healthy looking woman, aged 45, was brought to the surgery on the morning of Monday, January 28, 1850, with a small femoral hernia, which had been strangulated ever since Wednesday evening.

Her bowels had not been opened since Wednesday. She had been vomiting matters described as being of the odour and colour of fæces; did not complain of much pain nor tenderness; countenance somewhat anxious, and pulse accelerated; had used clysters, and taken some opening medicines without effect; *no attempts had been made to return the intestine.* The house surgeon, by exerting gentle pressure for four or five minutes, succeeded in reducing the tumour, and the patient having been transferred to Queen Ward, shortly afterwards had a healthy and copious alvine evacuation, and expressed herself as being free from pain. 8 p.m.—Has no pain; bowels have acted again twice; feels comfortable.

On the following day, at noon, it was found that a sense of sickness had returned; the abdomen was tumid, tympanitic, and tender; countenance anxious; features pinched; pulse 140 and small; tongue dry.

Upon examining the case, Mr. Lloyd felt an indistinct tumour in the femoral region, like a half-emptied cyst, and in concurrence with the opinion of Mr. Paget and others, decided upon cutting down to examine it, although from the severity of the symptoms, and the great prostration of the patient, there could be but little hope of relieving her.

Operation.—After dividing the integuments by pinching them up, there was exposed a mass resembling a piece of omentum; but, upon cutting deeper than this, there was found the peritoneal sac; on opening this, some matter of an offensive odour, like fluid from the small intestines escaped; no intestine nor omentum was seen; the ring was divided, and the wound left open. At 7 p.m. she sank.

No *post-mortem* allowed.

Remarks.—In the absence of information, which an examination after death could alone have supplied, it seems necessary to suppose, that previous to the reduction of the hernia, processes had been set up, which subsequently terminated in perforation of the intestines, speedily bringing on severe peritonitis, with characteristic prostration; a part of the escaped matter getting into the femoral canal, and exposed in the course of the operation. Had the swelling, which was felt, proved to have been a small piece of the intestines, held by adhesions to the ring, (as occurs in many cases,) by establishing a free external opening a happier result might have been anticipated, and the discharges containing some blood.

KING'S COLLEGE HOSPITAL.

On Saturday last Mr. Fergusson performed two operations of importance: lithotomy and amputation at the ankle joint.

The first case was one of a somewhat unusual character, requiring an operation somewhat different from that usually put in force by Mr. Fergusson. There was here a stone in the bladder, combined with a bad stricture of the urethra, and abscess in the perineum. The patient, an elderly man, had been sent into the hospital for stricture of the urethra simply, under which he had laboured several years. Latterly, however, there were some symptoms of stone, and, when an instrument was enabled to pass into his bladder, it was discovered, that a calculus was there. Dilatation of the stricture, which was situated at the bulb, was carried on, but it advanced somewhat slowly, and, as this was the case, and the patient extremely anxious to have the stone removed from his bladder at once, Mr. Fergusson determined to so modify his mode of operating as to divide the contracted canal, and at the same time cut into the bladder and take out the stone. The proceeding was accomplished in this manner:—A small grooved staff, (No. 6,) was introduced through the stricture into the bladder; an incision was then begun in the perineum, higher up and more in the central line than is usual in the lateral operation; this was carried down on the left side to near the anus, and another incision was made from the centre of this by the right side. The knife was then carried deeply down upon the grooved staff, and the stricture was freely divided. A beaked knife, with a cutting edge on each side, was then cautiously introduced into the groove of the staff, and carried into the bladder. The forceps were then used, and the stone, which was of the size of a large chestnut, was seized, but being very soft, it easily broke, and it was necessary to resort to the scoop before the whole

of it could be got away. The bleeding was freer than usual, and, of course, the operation was both more difficult and more lengthy.

The other case was one of disease of the ankle-joint of fifteen months' standing, occurring in a young man who had served in the army. As there was no evidence that the disease extended higher up than this articulation, Mr. Fergusson thought fit to put in practice the operation recommended by Mr. Syme, and it was performed in the following manner: — The leg being firmly held by an assistant, who at the same time compressed the tibial arteries, Mr. Fergusson made an incision across the front of the ankle, going from the inner to the outer malleolus. This was continued round the sole of the foot, until it joined its commencement at the inner malleolus; the joint was then cut into in front, and the foot separated—a flap being saved from the integuments covering the os calcis. As the disease was found to involve the upper surface of the articulation, a thick slice of the tibia and fibula, together with the two malleoli, was removed by the saw, and the flap of skin, which were found to be ample, brought over the divided extremities. On examination, the joint was found to be extensively diseased.

PROGRESS OF MEDICAL SCIENCE.

FRANCE.

[From our Paris Correspondent.]

SECONDARY SPASMS DURING CONVALESCENCE FROM CHOLERA.

It sometimes happens that patients, recovering from an attack of cholera, are seized, without any evident cause, with nervous symptoms of a particular nature. These consist in muscular spasm, which M. Burg distingushes into symptomatic and essential. The former species commences with stiffness of the wrist or elbow-joints, accompanied by a sensation of heat, and soon terminates in permanent contracture. When this has been established, the shoulder-joint remains free; but the other articulations of the fore-arm and hand present a most perfect state of contracture. The hard and contracted muscles are the seat of very violent pain, and the least attempt at motion increases the torture. In seven cases of this singular affection observed by the author, the spasms were not preceded by any nervous symptom, and remained confined to the upper extremities.

The essential spasms are met with less frequently than the former, and generally commence with some slight cramps, soon followed by nervous twitchings; these, instead of being confined to the upper extremities, may attack the muscles of the face or of the lower extremities; but the cramps soon subside of themselves, and nothing remains except the muscular twitchings. The latter were exactly similar to the spasmodic subsultus of typhoid fever, and were easily observed in the superficial muscles. They were accompanied by a creeping sensation, but the joints remained supple, and the affected parts free from pain on pressure.

When the nervous accidents, thus described, had continued for about three weeks, they often disappeared just as suddenly as they came on, leaving nothing behind except slight stiffness.

The treatment adopted by M. Burg, and followed up by many of the hospital physicians, especially at the Hôtel Dieu and Cochin, consists in the employment of galvanism, which is applied either in the usual way, or through means of metallic bands. This is rapidly and almost universally successful in cases of symptomatic spasm, but failed to relieve that form which the author denominates essential.

THERAPEUTIC EFFECTS OF SOME METALS.

M. Burg, the author of the above memoir, which is published by the *Gazette Medicale*, Feb. 2nd, presented another paper on the same subject, at the last meeting of the Institut. The influence of certain metals on loss of sensation was examined in this memoir.

The author commences by observing, that in a great number of nervous diseases, hysteria, &c., and in typhoid fever, &c., the general sensibility is sometimes diminished either so far as regards the sentiment of pain, or of pain and touch together. In cases of this kind, when the nervous centres and nerves are free from organic lesion, and the properties of the skin remain intact, the following phenomena are observed, whenever the affected limb is embraced by the copper or galvanic rings.

Firstly,—The patients feel a creeping sensation underneath the rings, which often radiates towards the head or trunk. This sensation may not, at first, commence until an hour has elapsed after the application; but the interval gradually diminishes with each application, and soon does not exceed a few minutes or seconds.

Secondly,—This creeping sensation is always a forerunner of the return of sensibility, which is generally restored to its normal state in one or two days.

Thirdly,—Some time after the return of the sensibility we observe a third phenomenon, which consists in a feeling of *heat*, radiating from the neighbourhood of the ring, and mose intense beneath it.

Some patients even fancy that a warm body has been applied to the skin, and the development of heat may be detected by the thermometer.

The above conclusions have been drawn from numerous experiments made by the Author at the Hospital of Salpêtrière, during which he had occasion to observe some curious particularities. Thus, in cases of recent and complete loss of sensibility from cerebral concussion, the mere placing in the hand of the affected limb a few copper coins will often restore the sensibility for a short time. In other cases, when the paralysis of sensibility is recent, superficial, and apt to pass from one point of the skin to another, it is quickly removed by frequently approaching a pin, or any metallic wire which is a good conductor of electricity, to the affected part.

Nay, more, in some cases of deep-seated paralysis which occurred in old hysterical affections, the sensibility of the arm was restored by the mere use of a common thimble. This curious effect was remarkably witnessed in the case of an epileptic patient named Valois, at Salpêtrière.

TREATMENT OF DEAFNESS.

At the same meeting of the Academy, a memoir was read from Mr. Yearsley, of London, "On a new Method of Treating Deafness in cases of Perforation of the Tympanum." The author's view and observations, which appeared to be quite unknown to the majority of the Assembly, were listened to with much attention; but it is unnecessary to allude further to them here, as the English reader is familiar with them already.

ENGORGEMENT OF THE UTERUS.

At the Academy of Medicine M. Recamier occupied nearly the whole *sceance* with a discourse on engorgements of the uterus. As the views of the learned Professor on this subject are rather peculiar, and his authority great, the following analysis, may be acceptable. M. Recamier holds, that many cases of uterine engorgement are not merely inflammatory, but depend on a certain condition of that organ, which he denominates *erectile*. After having described at some length the erectile condition of the margin of the anus, so frequent in women, and accompanied by so much general disturbance, M. Recamier passed to the same condition as it affects the neck or mouth of the uterus. It may occur at any period of life, but is most frequent after delivery. The tumefaction produced by the engorged vessels gives rise to an elasticity quite different from that of inflammation or scirrhus. It is seldom accompanied by fever, though often so considerable that we cannot embrace the os tincæ within the speculum The neck of the uterus is more or less painful, and discharges of a leucorrheal nature, or even hæmorrhage, take place with more or less abundance. These local symptoms are soon attended by general disturbance. The patient labours under a great variety of dyspeptic or gastralgic derangements; nausea and vomiting, palpitstions, headache, vertigo, numbness of the limbs, spasms, hysteric symptoms, and secondary inflammations of different kinds. Local hæmorrhage soon causes anæmia, and, as the disease advances, vegetations may spring up from the diseased surface, or, in bad constitutions, even carcinoma.

The progress of the disease may be rapid, or it may disappear, to recur under the influence of the causes which originally gave rise to it. The constitutional symptoms give way with the local disease, and it is these variations which have given vogue to so many modes of treatment. Thus, in some cases, cauterization, or emollients, or calmants, or derivatives, may succeed at a moment when other modes had failed; but this success should only teach us the necessity of being *apropos* in everything.

Erectile engorgement of the uterus, like the analogous disease of the rectum, is often chronic, and the patient remains in a cachectic state of suffering until relieved by art. The means of relief are various, and by turns successful; emollients and calmants in the drink; as liniments, injections, &c., together with rest and a proper regimen.

Local cauterization.

Revulsives to the groin or loins.

Tonics and preparations of iron. Excision; ligature.

For cauterization, M. Récamier prefers the nitrate of silver to the acid nitrate of mercury, because the former produces a drier eschar, and gives less pain. The solid caustic of Filhos(a) presents many advantages; but we should reserve it for cases requiring great destruction of parts. Many precautions are necessary during the use of this powerful caustic.

The ligature is required for fungous vegetations springing by a pedicle from a healthy surface. The ligature should always be tightened *gradually* to avoid the danger of peritonitis, which M. Récamier has seen produced by the opposite practice; or the vegetations may be removed by torsion, with a polypus forceps.

After having cited a great number of cases in support of the preceding doctrines, M. Récamier terminated his interesting lecture—for such the discourse really was—by the following conclusions:—

1. There are certain engorgements of the uterus capable of being resolved, which are neither inflammatory nor connected with hypertrophy, scirrhus, tubercle or fibrous tumours, but depend on elastic tumours, and ordinarily bleed as soon as the epithelium which covers them gives way.

2. These engorgements follow the same course as the analogous disease of the rectum.

3. They are of frequent occurrence; and when they have been established, never cease until *all* the erectile capillaries which compose them have been destroyed.

In a subsequent discourse, M. Récamier proposes examining this condition, when it exists within the cavity of the uterus.

The Committee of Public Assistance, a body somewhat analogous to our Poor-law Commission, has recently adopted an excellent measure; private rooms for patients able to pay 2 francs (1s. 8d.) a day, are to be opened at St. Louis and the Venereal Hospitals. The best care and the advice of experienced physicians will thus be secured to persons of the middle-class at the most moderate rate.

RULE FOR ADMINISTERING CHLOROFORM.

M. Dudart, a dentist, who has had very extensive experience of chloroform, proposes the following rule for determining the degree to which the inhalation of this energetic agent should be carried.

On the one hand, it is necessary to produce a certain amount of insensibility, and on the other, it is dangerous to push this insensibility too far. By what sign are we to know that the inhalation has been carried to the proper extent? M. Dudart thinks we may find this sign in the species of *trismus* which affects the elevator muscles of the lower jaw. When the jaws and teeth are pretty firmly pressed against each other, and some force is required to separate them, we should suspend the inhalation, and may perform the most painful operation in full security, for the patient has ceased to feel.

(a) This is the Vienna caustic, fused and moulded in a leaden envelope.

DIFFERENCE OF THE REFLEX FUNCTION, ACCORDING TO THE SPECIES AND AGE, IN THE FIVE CLASSES OF VERTEBRATED ANIMALS.

All authors agree, that the reflex function is weaker in warm-blooded animals than in the cold-blooded; but this does not hold good, if we compare the mammalia and birds with reptiles and fishes. M. Brown-Sequard has insisted on this point in a memoir recently addressed to the Biological Society of Paris. He likewise shows, that the differences of the reflex function in the various groups of vertebrated animals do not depend, as many writers suppose, on the differences of animal heat; neither is it in inverse proportion to the rank which the class holds in the scale of animal organizations. Is the energy of the reflex function inversely proportionate to the age of the animal, as all physiologists assert? M. Brown-Sequard says no. It differs with the species. Thus, in birds the function predominates in adults; while in the cat, dog, and rabbit species, it is stronger in the young. M. Sequard, however, thinks that the energy of this function is in direct proportion to the quantity of grey matter in the spinal marrow, and to this interesting fact he proposes recurring at a future period.

SCOTLAND.

[Edinburgh Correspondence.]

PATHOLOGICAL SOCIETY.

The 16th of January was appointed for a pathological meeting of our Medico-Chirurgical Society, but it proved a failure; the attendance of members was so scanty, that an adjournment took place, no business being entered on. There was matter enough, but no sufficient audience. Several causes concurred to this result, the chief being a plan, recently adopted, of intimating the pathological meetings (which alternate with the regular meetings) by one tabular card, at the commencement of the session, instead of announcing each meeting, as in the case of the other meetings, just before it is to take place. The pathological meetings are extra meetings, instituted by the present President, and hitherto they have been very successful. There has been no lack of matter of the greatest interest, and the audiences have been, up to this last occasion, more numerous than could have been anticipated. The President was not among the absentees, though some of us think he should have been absent. He was to have been one of the guests at the Royal Medical Society's Annual Dinner, which took place the same evening, but excused himself, as being under an obligation to attend the Medico-Chirurgical Society. The Medical Society's Dinner is too little patronised by the senior resident members. It would be well if they refreshed their memories once a year with youthful recollections. The Medical Society, like the other Institutions in Edinburgh connected with Medical Education, is prosperous this year.

MEDICAL GALVANISM.

The first February meeting of our Medico-Chirurgical Society took place on the 6th current, when Dr. Wright read a paper on the mode of applying Galvanism in the treatment of Diseases. Dr. Wright's methods are highly ingenious, and the apparatus constructed by Dunn, under his direction, has the advantage of being at once cheap and effective. A desultory conversation ensued on the evidence of the utility of electricity and galvanism in various forms of disease, regarding which, as might be anticipated, there was but little harmony of opinion.

SKODA'S VIEWS OF METALLIC TINKLING AND AMPHORIC BREATHING.

Dr. William Robertson then read a short account of a case of pneumo-thorax in a woman, who had died fourteen hours after being received into the Infirmary. The case was brought forward chiefly to illustrate Skoda's views of the conditions under which metallic tinkling and amphoric breathing occur. During the short time the patient was in the Infirmary before death, both these symptoms were distinctly present. The *post-mortem* examination showed, that there was an aperture of communication between the cavity of the pleura and the bronchi, but that the communication was by no means free; also, that there was condensation of the lung around the bronchi, adjacent to the aperture by which the air had escaped; and further, that the immediate cause of death was severe bronchitis of the opposite side of the chest. Dr. Robertson gave some account of Skoda's views on the two symptoms referred to, which he said had met with too little attention in this country, and still less in France; the French pathologists, for the most part, still retaining the original ideas entertained by Laennec as to the conditions on which metallic tinkling and amphoric breathing arose. He dwelt particularly on an experiment described by Skoda. In this experiment both sounds are produced by means of an inflated stomach removed from the body. Two stethoscopes are applied at opposite sides of the inflated stomach; one person speaks or breathes into the one stethoscope, and another applies his ear to the other, when the one or the other sound is heard, or both together. This short Paper led to an interesting discussion as to the conditions on which these two sounds are produced, and how far there is evidence of the existence of pneumo-thorax, independently of communication between the bronchi and the cavity of the pleura. In regard to the latter of these two questions, it was well exemplified how much more easy it is to be sceptical than to weigh the difficulties of evidence; for it was very generally maintained, not only that there is no proof of the existence of idiopathic pneumo-thorax, but that there is equally little proof of the occurrence of abdominal tympanites, independently of a communication between the intestines and the peritoneal cavity. It is plain, that both are rash opinions, and in the face of testimony of much weight.

With regard to the question, as to the conditions on which metallic tinkling and amphoric breathing occur, it is quite true, that most French authorities, up to this time, have followed Laennec in regarding the presence of both air and liquid, in the cavity of the chest, as well as a perforation in the lung, as essential to their production; but in this country a different opinion has been not unfrequently expressed. Thus, in the year 1830, Dr. Spittal, of Edinburgh, described the sound of the dropping of a fluid, and metallic tinkling, that is the sound like that produced by striking a metal cup with a pin, as indicating the presence of air and a liquid; the metallic resonance, heard after speaking or coughing, as denoting the presence of air only; while he considered amphoric respiration alone as requiring perforation of the lung, along with the presence of air and liquid for its production. So, also, Dr. Williams says that metallic tinkling may attend both the voice and cough in pneumo-thorax, when there is neither liquid effusion nor perforation of the pleura; but he also regards the amphoric breathing of pneumo-thorax as dependent on perforation of the pleura. Dr. Watson, however, seems completely to have anticipated Skoda's view of the only indispensable condition of these symptoms; for, speaking of "metallic sounds and amphoric resonance," he says:—"They are very singular and they are perfectly decisive (as far as my experience has gone) of the presence of air in a considerable cavity within the thorax; which cavity mostly contains liquid also; and of the presence of air and liquid in the cavity of the pleura in particular. I do not know that the liquid is essential; I do not believe it is; but commonly there is some liquid, and a good deal of air. Almost always, too—*but that is not indispensable*—the cavity communicates with the external air, either through the walls of the chest or through the bronchi."

It cannot be said that the farther elucidation of metallic sounds and amphoric respiration is of very high practical importance, since, in so far as they are diagnostic of pneumo-thorax, they are sufficiently understood; yet it is an *opprobrium medicinæ* that so much discussion should have taken place regarding these, through a long series of years, without bringing about any general unanimity of opinion.

EDINBURGH MEDICAL NEWS.

Under the head of Medical News, Dr. Bennett, who was in the chair, afterwards gave a short description of a case of paralysis confined to the extensor muscles of one arm and one leg, which, after a course of simple treatment, disappeared.

The excavations for the foundation of the addition to our Surgical Hospital are already commenced. At a meeting of the Managers of the Infirmary on the 28th of January, Dr. Thomas Wright, a young English physician, was appointed one of the ordinary physicians to the Infirmary, in the room of Dr. George Paterson, who has left Edinburgh to establish himself in the south of England. We have been much gratified here by a visit from Monsieur Lemercier, with a collection of the wonderful anatomical models invented by Dr. Auzouse, of Paris. It is really impossible to exaggerate their merits.

IRELAND.

[Dublin Correspondence.]

HOSPITALS AND MEDICAL CHARITIES OF DUBLIN.

The subject of the Medical Charities of Dublin continues to arrest no little attention in high places. Sir William Somerville has not yet, in his place in Parliament, hinted at any sudden extinction or any organic modification of these Institutions. A meeting of no ordinary character, however, has just taken place, to consider the subject for him; the ratepayers, or, rather, their representatives, of the South and North Dublin Unions having been putting their heads together, for the purpose of opposing the proposed steps of the Government. A sum, about one-fifth of that expended on the British Museum, has hitherto sufficed for the support of these establishments; it was stated that this was about to be withdrawn. Such a change, (in the present condition of the country) it need not be said, the Government dare scarcely make without some due compensating arrangement, so that much virtuous indignation was thrown away. It was stated, that two hospitals would afford sufficient accommodation to the poor of the city. The Government should not lend its ear to such cheeseparing economists. It must be confessed, that the time for withdrawing the grant is a most unfortunate one; and except the Hospitals are put on a better foundation by so doing, it would be better to "leave well alone."

COMPRESSION IN POPLITEAL ANEURISM.

At the Dublin Surgical Society, a somewhat interesting case of popliteal aneurism, treated by pressure, has been lately under discussion. It occurred in the practice of Dr. Madden, 43rd Light Infantry, and suggests one or two points of novelty. The tumour was very large; all the usual marks of aneurism present. On the 7th January Dr. Carte's instrument for pressing the artery was put on below the *propenda*,—Read's higher up, where the vessel passes over the pubis. The most remarkable point, perhaps, in the case (lost sight of in a very useless discussion, got up by Dr. Hutton, the last man in Dublin, by the way, to originate a row) was this—that the aneurism was cured, but the man died from the bursting of the vessel as it passes along the *psoas* muscle. The instruments were put on on the 7th; on the 9th, some pain and œdema ensued; on the 11th, amendment; on the 12th, the tumour lessening—with fever, however, and rigors—the pulse at 110; 17th, tumour still better, but all the other symptoms aggravated exceedingly. He died on the 18th of well-marked gangrene.

On a *post-mortem* examination, the aneurism was as large as the doubled fists; the sac perfect, and quite solid; its contents pure unorganised-looking fibrin, in layers, with the exception, of course, of the centre, in which there had not been time for the change. The artery itself was pervious to within an inch and a half of the aneurism. There seemed no injury whatever from the pressure kept up by the instruments—a point also of interest; but further up an *aneurismal tumour had given way in the abdomen.* The case at once suggests the necessity of care and watchfulness under similar circumstances, and the need of stethoscopic and other inquiries before having recourse to the clamps. It is a question, indeed, whether, if such another case happened, it would not be the best practice to let it alone. We have been perfecting our instruments, perhaps too quickly, and not considering sufficiently the danger of suddenly turning the tide of the circulation back into other channels. Much credit is

due to Dr. Bellingham for giving a new character to the subject, and, by a sort of metempsychosis, a new life and form to the crude fancies of Todd and the Paris grocer mentioned by Richerend, the original discoverer of the thing. Into the troubled waters of the controversy—after the late dispute, whether we are living in the middle of next year, or only the beginning of 1850—we are very unwilling to enter. That Mr. Todd first tried, and successfully too, the pressure plan, there can be no doubt; but it seems just as clear, that, with the old traditional veneration for the knife in their minds, the men before Bellingham were half afraid of the spirit of innovation they had called from the "vasty deep," of pure unadulterated surgery. To Dr. Bellingham is fairly due the credit of giving shape and form to one of the most valuable discoveries in surgery, and we willingly concede to him the praise bestowed by Sir Philip Crampton.

GANGRENE OF THE LUNG.

A highly valuable paper, from the pen of Dr. Stokes, has just made its appearance, if our friends of the *Quarterly* would not hide their illuminative powers under a bushel. Perhaps the chief points may be glanced at. Dr. Stokes, it need not be said, is known wherever the Literature or Medical History of Ireland is valued. The disease under consideration, he does not consider as fatal as its name would possibly imply. A long time studying it, his papers, perhaps, comprise everything known on the subject. It is rarer than might be expected, according to his experience, in æsthenic affections. Fetor of the breath is not essential. Pain of the most extreme kind sometimes attends it; it is increased, rather than diminished, by over-stimulating the system, and contact with air is not necessary for its formation. With respect to hæmoptysis, he says, it attends it chiefly in the "remittent" form. At an early period, when the disease is forming, auscultation and percussion fail in detecting the mischief already impending. Evidences of congestion seem to *follow*, rather than *precede*, the more manifest symptoms of gangrene. Dexiocardia, from diminished volume, occurs where the right lung is the seat of the disease. Gangrene may attack a lung previously hepatised, or in a chronic tubercular condition; *it is rare in typhus, but often met in "typhoid,"* and is sometimes quite evidently the result of pressure on the nutrient vessels of the lung. Added to what we already know of this disease, these particulars are of very great practical value.

SELECTIONS FROM FOREIGN JOURNALS.

STRUCTURE OF THE KIDNEY.

Since Bowman's discovery of the structure of the kidney, his views of the connexion of the Malpignian body and urinary tubule, have been confirmed and contradicted by many observers. The author made use of a method hitherto little applied; and had for his object to determine the mode of termination of the tube and its junction with the capsule.

Injection of the urinary tubules is difficult; injection of the arteries unsafe; and finally, it is impossible to obtain fine sections without violent rupture and tearing of the structures. For these reasons the author was led to the use of dried preparations.

To these putrefaction, shrinking, and permeation with the blood, constitute the main objections. They were obviated by the use of nitric acid. He washed the objects in a very dilute warm solution, raised it to the boiling point, and then, removing the mass, dried it in the open air. In twenty-four hours the preparation was complete. The kidney, similarly heated with commercial acetic acid, is longer in drying, and contracts more, and has the vessels obscured; but the smaller constituents of the tissue are much clearer. Hence it is preferable to use both. The brittleness of the mass renders it advisable to damp it before cutting. The application of a drop of water expands the section; and the substitution of a little weak carbonate of potash makes the object almost as clear and distinct as the fresh specimen. The author concludes that—

1. The urinary tubules increase their diameter in the cortical layer.

2. The capsule is a direct continuation of the membrana propria of the tubule, constituting a flask-shaped dilatation at the end of the tubule, in which hangs the Malpighian glomerulus.

3. No interstitial areolar tissue is present between the tubules. Only the larger blood-vessels are accompanied by this tissue.

4. Capsules appended laterally to the tubules have only been seen by the author in the kidney of the fish.

5. There is no second capsule proper to the tuft (such as Bidder describes). In breaking the Malpignian capsule of the frog, the tuft often protrudes through the ruptured neck; but no such covering can be seen. The cells found here are not to be regarded by the author as proving even an epithelial layer; although he has never seen the vessels absolutely naked.

The author recommends albumen instead of water for examining the ciliary movements in the kidney of the frog and carp. In comparative anatomy the greater the diameter of the tubules the lesser the size of the Malpignian tuft.

The pathological examination of the kidney is equally assisted by this method. The author mentions two cases of Bright's disease and renal abscesses respectively. In the former, the capsules were surrounded by a fibrous matrix; in the latter the suppuration appeared both tubular and interstitial in origin and situation. (*Von Wittich. Beitrage zur Anatomie der Niere. Abridged in Schmidt's Jahrbucher, No.* 11, 1849.)

MUD IN THE LUNGS.

The following case illustrates the passage of mud into the extremities of the bronchial tubes, during the act of drowning:—

Hurree Balloo, a Hindoo cow-herd boy, aged 13 years, was found dead in the great open drain of Bombay, where it passes through the marshes to reach the sea on the outer side of the island. On a *post-mortem* examination, no marks of violence or traces of disease appeared throughout the body. The head and face and upper part of the trunk were swollen, congested, and discoloured, as in cases of asphyxia. A bloody fluid, mixed with black mud, was issuing from the mouth and nostrils. The hands and nails were covered with mud, the lungs were distended, and the diaphragm depressed; the blood fluid, and the right side of the heart gorged. On opening the trachea from the larynx downwards, mud was observed in it similar to that which flowed from the mouth and nostrils, and to that in the drain; it was in large quantity, and extended into the minute branches of the bronchi, so as slightly to impart its colour to the substance of the lungs.

There was a little of the same kind of black mud in the œsophagus, but none had reached the stomach.

Observations.—Although Marc, Orfila, and others have established the fact, that froth and water may be found in the trachea of the greater part of those who are drowned, yet Orfila states, that the presence of sand or gravel is so uncommon, that out of fifty dissections he had only seen it once. While Devergei observes, that mud only exists in the trachea after very prolonged submersion. It is obvious that the latter author should not have restricted the passage of mud into the trachea to that period, when from the decomposition of the body it becomes an accidental occurrence, but rather to have allowed that, under certain circumstances, its presence, both in the trachea and in the lungs, may be occasioned also by a vital act. This is proved to have been the case in the present instance, and not to have been from prolonged submersion, from the force with which the mud must have been sucked up to have reached the extremities of the bronchial tubes, and from the short interval which must have elapsed between the drowning of the boy and the time when he was discovered dead and dragged out of the ditch by a policeman.—*Transactions of the Medical and Physical Society of Bombay.*

OZONE.

This peculiar substance, the nature of which is yet far from being understood, has recently attracted much attention on account of its supposed connexion with epidemic diseases. M. Schoenbein, of Bâle, has submitted it to some new experiments, the results of which were communicated by M. Becquerel, at the last meeting of the Academy of Sciences.

M. Schoenbein procures ozone in large quantities, by enclosing a small quantity of water in a balloon having a capacity of ten to fifteen quarts. Small bits of phosphorus, of one centimetre in diameter, are then placed, half in the water, half in the air of the balloon; the latter is closed imperfectly, and its contents raised to a temperature of 60 to 68 degrees Fahr. When the operation is completed, — a circumstance readily known by the peculiar smell of the air in the balloon, the latter is turned down over water to get rid of the phosphorus, and then agitated to wash the compound. A cork, supporting two tubes, is now attached to the balloon, and through one tube some water is introduced, while the other gives exit to the ozone. This substance, when concentrated, has an odour resembling that of chlorine; when mixed with air, it gives out an odour like that emitted from an electric machine, while in motion. Air, thoroughly charged with ozone, produces some difficulty of breathing, and, according to M. Schoenbein, is often the cause of catarrhal affections. Small animals placed in it die quickly. Ozone is insoluble in water; it destroys rapidly organic colouring matters, as well as those having albumen and ligneum for their base. According to the author, it is the substance which has the greatest affinity for oxygen of all known bodies. As it is invariably produced in the air by the action of artificial electric discharges, it must be produced in the atmosphere under the influence of the same cause, when natural. Nothing is more easy than to determine the presence of ozone in the atmosphere, and the variations of quantity it presents. For this purpose we have merely to test the air with some paper impregnated with a solution of sulphate or muriate of magnesia. The ozone decomposes the salt rapidly, and the paper assumes a brown tint. Generally speaking, this action on the paper is found to be stronger in winter than in summer. M. Schoenbein observed, that it was always stronger during falls of snow than at any other period. Up to the present moment this curious body has defied chemical analysis. M. Marignac thinks that it is a peculiar modification of oxygen. M. Schoenbein regards it as a bis-oxyde of hydrogen, or a substance probably containing a greater quantity of oxygen than oxygenated water.—*Gaz. Méd.*, Jan.

DIAGNOSIS OF BILIARY CALCULI.

M. Faucouneau-Dufresne has addressed a letter to *L'Union Médicale*, pointing out that he had already mentioned, in his Work on the bile, the sign considered by Martin Solon, when present, as diagnostic of gall stones, viz., a crepitation felt by the hands or the stethoscope in the region of the gall bladder, when a strong inspiration is made. In the same letter it is stated that the most painful period in the passage of gall stones is as they traverse the cystic duct. When they have passed into the ductus communis coledochus, the pain becomes less intense and jaundice ensues in many cases. The pains increase again temporarily when the calculus passes into the duodenum. The influence of the remedy of Durande, viz., a mixture of ether and turpentine, in the case of calculi in the gall bladder is doubted. The alkaline treatment is more recommended.—*L'Union Médicale*, Jan. 10.

CHLOROFORM IN ORCHITIS.

M. Bouisson, who has lately strongly recommended the external and local application of chloroform in various painful affections, employs it in hernia humoralis, in the following way:—A compress made of several folds of linen is dipped in chloroform and placed on the part, covered over with a piece of gummed silk, and the whole is supported by a suspensory bandage. The chloroform is renewed every three hours during the first day, and on the second day, if necessary. When first applied, a sensation of considerable smarting is felt, which lasts only a few minutes, and the skin becomes red. Then the sensibility diminishes, first of the skin, and subsequently of the deeper seated parts. The lumbar pains disappear at the same time. It is singular how rapidly this diminution of pain leads to diminution in the size of the organ, especially if the usual internal treatment is carried on at the same time. The only in-

conveniences are occasional redness and slight blistering of the scrotum.—(*L'Union Méd.*, Jan. 8.)

PRIZE FOR THE DISCOVERY OF AN ARTIFICIAL MODE OF PREPARING QUININE.

The Société de Pharmacie of Paris have declared a prize of 4000 francs, to the chemist who shall discover a mode of making quinine without employing cinchona bark, or any organic matter containing quinine already formed. The formation of several organic bodies, in the last ten years, has given rise to the hope, that quinine, or a substitute for it, may be thus formed.—(*L'Union Méd.*, Jan. 8.)

We have to repeat our request, that gentlemen, when they favour us with communications, will have the candour to inform us, if, at the same time, they have forwarded copies for publication to any of our Contemporaries. Every Editor ought to be allowed to exercise his own judgment as to a Communication being of sufficient value or importance to warrant its appearance simultaneously in more than one Journal. For our part, we claim the right to use our editorial discretion as to the admission of such papers into this Journal; and the columns of the *Medical Times* will be closed against those who may offend in this matter. Moreover, we would remind whoever it may concern, that the act of sending the same paper to contemporary Journals has a very quackish, and, therefore, unprofessional appearance; it seems as if the writer sought more to circulate his own name than to advance science; and, when such a motive influences an author, then, in our opinion, an advertising column of the daily press is the most appropriate medium for his purpose.

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THE MEDICAL TIMES.

SATURDAY, FEBRUARY 16, 1850.

We have to announce to our readers an important, and we would hope progressive, change in our Cabinet—in official language, to gazette John Churchill, of No. 46, Princes-street, Soho, to be Publisher of the *Medical Times, vice* William Somerville Orr, of 147, Strand, and Amen-corner, Paternoster-row, resigned.

We have no doubt that not only will this change not impair, but even increase, the usefulness of the Journal and its influence on the Profession. The well-known character of Mr. Churchill is a sufficient guarantee that the duties of the Publisher will be performed in future with as much care and exactitude as they have hitherto been by Mr. Orr, whose resignation, however, we cannot thus briefly pass over.

The appearance of that gentleman's name on our Journal, at once affixed to it that stamp of respectability which we would fain hope the *Medical Times* has fully sustained. It was justly to be expected that a Journal of which he was the Publisher would be conducted on high and honourable principles.

The consciousness that we should be thus supported, gave us strength to take the reins, at a moment when it required no little exercise of moral courage. It was the warrant of his name that enabled us to attract those contributors to whom we were personally unknown, —men who would have indignantly refused to aid us in the success of a Journal likely to become the organ of a party or the pander to malignant passions.

To the Editor, personally, the resignation of Mr. Orr as Publisher of this Journal, is the severance of a tie of the utmost kindliness and regard; he readily acknowledges the assistance which, on all occasions, he derived from his advice; and it is with the highest gratification he now announces, that the arrangements made for the future publication of the *Medical Times* meet with his entire concurrence and approbation.

With respect to any inuendos which may be set afloat by interested parties as to the subsidiary influence which the relations that exist so extensively between Mr. Churchill and the Profession may exercise over the honesty of our Criticisms—we do not think it necessary to do more than refer to the conduct of the *Medical Times* during the past year; and to assure our readers that an equal impartiality and freedom from party bias will be preserved by the Editor and his coadjutors in the time to come. Our Publisher would as little desire as we should permit, the *Medical Times* to become a party agent, or a mere vehicle for the accomplishment of personal and private ends.

The *Medical Times* is not *the* Journal which can be justly charged with the constant abandonment of principle for the sake of attaining the object of a vulgar and unprincipled ambition.

THE REPLY OF THE COLLEGE OF SURGEONS.

The Council of the College of Surgeons have at last done their deed. They have been long in incubation, and have hatched a cockatrice. There is mischief enough in their progeny to foment an Iliad of quarrels. The Council have thrown down the glove against all comers. Mr. President Green and Mr. Guthrie hurl defiance against all combatants, of whatever might and mettle. We hope the Council will lay themselves out for the work, for we promise them a stouter contest than any in which they have ever yet engaged. Their arrogance will be met with firmness, and their cunning with equal skill; and perhaps they will discover in the end, that the battle is not always with the strong. What! does the Council think, that because they are Hospital Surgeons and privileged teachers, they have a Charter to be disdainful and unjust? Do they think, that the members are to be deprived of their rights, in order that their isolated dignity may stand forth with false lustre to the world? How many of these men are really eminent as Surgeons? And suppose all were, would that be a justification for disfranchising the Members? If these Councillors are all men of high repute, why should they fear the unbought and unbribed suffrages of the members? Patience, gentlemen, we have not yet come to the issue.

The answer of the Council to the propositions presented by Mr. Bottomley, is conveyed through the Council of the National Institute. The College, however, clearly discriminate between the National Institute and the Committee of Associated Surgeons, and give to Mr. Bottomley the whole responsibility of the propositions. The brief notice of Mr. Bottomley and his scheme is what might have been expected. That gentleman has been unceremoniously snubbed. Both in the manner of the address and the matter of it, Mr. Bottomley can find no ground for complacency. We really sympathise with this gentleman, and if he will promise to make no more blunders we will strain a point in his defence.

Mr. Bottomley's propositions are, however, only a secondary matter, for the whole labour of the Council has been expended in the effort to justify their *abandonment* of the "Principles" for a Bill agreed upon at the College of Physicians, and to deprive the proposed College of General Practitioners of the *right to examine* in Surgery. We do not intend to argue this matter with the Council, for to argument they are insensible. We tell them that the General Practitioners demand the *legal recognition of the right* of controlling the curricula of study and examinations for their own class; and that their claims in respect to *surgery* they will never forego! Choose, then. Concede a College of General Practitioners, with a right to examine in Surgery, or convert your own Institution into such a College. The Profession will not be Council-ridden any longer; but are resolved, in some form, to have the management of their own affairs.

The National Institute have done noble service in the cause of the General Practitioners, and we trust that they will remain faithful to their trust. Let them nail their colours to the mast, and the Profession to a man will rally round their flag. We call upon the Profession to re-consider their position,—to change their policy, if need be, for a more comprehensive and fundamental arrangement, —and to unite, with a resolute purpose never to separate until they have conquered a peace. Be faithful one to another, and the Council of the College of Surgeons must succumb. Let there be but one will and one voice, from John o'Groat's to the Land's End, and the College of Surgeons will be shaken to its foundations. Unite! unite! The College has published a defiance, and the friends of justice must show no variance of opinion—no pusillanimity.

PROFESSIONAL NATIONALITY.

It has been stated in Contemporary Journals, as an illustration of Professional Nationality, that the majority of appointments of Army Medical Officers are given to our friends of the "Land o' Cakes." This, supposing it to be true, would perhaps be of little consequence, for so far as real talent, properly tested, is allowed to be the stepping-stone to office, a Kamschatkan, in our estimation, might assert equal right with Paddy, or an Esquimaux with an Englishman. But has the statement to which we have alluded any claim to credit? Not the slightest. When the last list of the Medical Department of the Army was made up,

the following appeared to be the respective proportions allotted to the three nations:—

English 182
Scotch 190
Irish ..... 203!

Total..... 575

The Inspector-Generals in full pay at the same period were:—

English 1
Scotch 1
Irish ..... 3!

Now, we challenge any of our readers or Contemporaries to prove this statement incorrect.

The best and most lucrative of all the army Medical appointments are in India; and the most remunerative is that of Bengal. Of these appointments, three are held by Irishmen, and one by a Scotchman. That of Bengal averages 2,500*l.* per annum, and is filled by Dr. Franklin, an Irishman. The other appointments, at Madras and Ceylon, are also filled up by Irishmen,—that of Bombay, by a Scotchman. In the home district, as at Chatham, there are no Scotchmen.

W. Henry, Dep. Inspector-General, is Irish.
Thomas Spence, Staff-Surgeon, first class, is English.
G. R. Dartnell, ditto, is Irish.

Sir J. M'Gregor has behaved more unjustly to his own countrymen than the public are aware of—few or none being placed in lucrative appointments. Dr. A. Smith, the professional assistant to Sir James, was *twenty-one years an Assistant-Surgeon!* while Dr. Kinnis, the Scotchman now serving at Bombay, was nearly *twenty-three years an Assistant-Surgeon!* Not only these, but numerous other instances could be adduced, to show the utter absurdity of the remarks as to exclusiveness or favoritism in this branch of the service. Are these cases of preference? Certainly not, since the average promotion for Assistant-Surgeons is from eight to ten years in the army!!

ILLUSTRATIONS OF THE DEFECTIVE STATE OF THE LAW OF LUNACY, WITH SUGGESTIONS FOR ITS AMENDMENT.

"During the troubles of the 15th century, a rack was introduced into the Tower, and was occasionally used, under the plea of political necessity; but it would be a great error to infer, from such irregularities, that the English Monarchs were, either in theory or in practice, absolute. We live in a civilised society, in which intelligence is so rapidly diffused by means of the press and the post office, that any gross act of oppression, committed in any part of our island, is in a few hours discussed by millions. If an English Sovereign were now to immure a subject in defiance of the Writ of Habeas Corpus, or to put an English subject to the torture, the whole nation would be instantly electrified by the news. In the Middle Ages the state of Society was widely different. Rarely, and with great difficulty, did the wrongs of individuals come to the knowledge of the public. A man might be illegally confined during many months in the Castle of Carlisle or Norwich, and no whisper of the transaction might reach London. It is highly probable that the rack had been many years in use before the great majority of the nation had the least suspicion that it was ever employed."—*Macaulay's England*, Vol. I., p. 33.

The account which the learned Historian here gives of the wrongs and cruelties which might be inflicted upon individuals some centuries ago, and the causes which must prevent their recurrence in this more enlightened age, contrast strangely enough with those cases of injustice and oppression, which, in connexion with the administration of the Law of Lunacy have recently been brought to light in our public courts. The historical eye recognises at once the outward and visible landmarks of social progression on the great highway of legislation; but statutes frequently and almost surreptitiously spring into existence in the secret by-ways of legislation—so to speak—which are arbitrary and cruel in their operation, and with the provisions of which the public is little acquainted. They are concocted by men who are mere theorists, and who do not understand practically the subjects upon which they legislate. This is eminently the case with the Act 8 and 9 Vic. c. 100, entitled, "An Act for the Regulation of the care and Treatment of Lunatics;" and we doubt much if our accomplished Historian, amidst all his immense and diversified stores of research, could find any enactment so incongruous and intolerant, even among the obnoxious statutes which were passed during the flagitious reign of James I.

This Act of Parliament passed with little or no discussion, and without any opposition, through the House of Commons and the House of Lords, in the session of 1845. The subject probably excited little attention and less interest; for, so slowly are the sympathies of the world excited in behalf of this class of sufferers, that while the trial and conviction of a political demagogue might raise a ferment throughout the island, the poor lunatic might remain within the gloomy precincts of Bethlehem or St. Luke's, chained by his waist to the wall, or with his arms fixed and pinioned on his chair of suffering, a more abject prisoner than ever pined away in the cells of the Inquisition. We are told, it is true, that a brighter day has dawned: but, when we come to investigate this matter, it would appear, that so tardy has been the progress of legislation for the amelioration of the condition of the unbefriended lunatic, that while our French neighbours could long ago boast of an admirable system of management, and of hospitals which have served as models for imitation throughout Europe; our Institutions, public and private, have lagged behind the progress of science, and the theory of legislation seems to have consisted only in devising forms of statistical returns, which are so meagre and unmeaning, and which require so little sagacity to keep, that, instead of demanding the supervision of a Board of Commissioners in Lunacy, they might just as well be kept in order by a Board of Custom-house Clerks. But the lunatic is, in France, a State-care; in England and Wales he is a cast-off encumbrance, left to the mercy and caprice of irresponsible individuals, who too often prey like wreckers upon the little remnant of whatever fortune he may possess. There is no mendicant in so pitiable a condition. His malady not only deprives him of his social rights, but removes him beyond the pale of humanity; for, immured within the walls of an asylum, as impenetrable as were those of Carlisle or Norwich, or any fortress of the Middle Ages, no one cares to heed what may be his treatment or his sufferings; nor is a whisper as to his real condition suffered to escape. It therefore becomes a matter of serious importance—nay, of public duty—to ascertain upon what principles persons are pronounced to be insane, and whether the forms prescribed by the Act are sufficiently well devised and guarded to protect the liberty of the subject.

Before a private patient can be legally detained in any house, there must, according to the 45th and 46th sections of the Act, exist an order for the reception signed by a relative or friend,—and two medical certificates, signed by two medical practitioners, each of whom has examined the patient separately; after which the Medical Superintendent of the Asylum, when the patient has been confined seven days, forwards a third certificate, describing his mental state and bodily health and condition. In theory these different certificates may appear very valid and conclusive evidence in proof of any person's insanity; but when we examine their real and intrinsic value, it is only marvellous to think that such documents should be recognized as legal instruments at all! Here we have to begin with an order requesting the proprietor of a Lunatic Asylum to receive a person as a lunatic into his house, signed by a relative or friend, who may have the most cogent motives for wishing such a person to be shut up. It seems never to have entered into the head of the Solon who devised this extraordinary piece of legislation, that the relation signing this order of reception might be governed by impure or criminal motives. He is required, therefore, to take no oath—make no deposition—attest no affidavit; but can sign away the liberty of his "fair kinsman" with as much facility and as little form as he may use in drawing out the most simple household memorandum. In what other court in the kingdom would a document so irresponsible in its character and so grievous in its consequences be received? Again, we do not charge the medical men signing such certificates, even wrongfully, in any case, with fraud, collusion, or conspiracy; but it is notorious, that among the vast number of medical practitioners—some highly, some imperfectly educated; some very talented and discriminating, others slow and impervious to impressions — the diagnosis between sanity and insanity may be very hastily and imperfectly made; yet are these certificates tantamount to a warrant for the absolute deprivation of social rights and personal liberty. There are few men who, even in their sound senses, would like to abide by the judgment of so irresponsible a tribunal—nay, we may go further, *quoad* the knowledge of our Profession in this matter, by stating a fact well known to the Commissioners in Lunacy, that these very certificates are frequently so imperfectly drawn up that they are constantly sent back for revision and amendation. We do not accuse, however, the Profession generally, either of ignorance or collusion; but we maintain that the forms prescribed by the Act 8 and 9 Vict., cap. c., do not afford sufficient protection for personal liberty; in exemplification of which we will cite an illustration, the details of which may, to a certain extent, be suppositious; but the outline will convey a veritable likeness, which will not fail to be recognized by all those who have had any ex-

perience in the management of private Lunatic Asylums.

A gentleman about forty years of age, having neither profession nor fortune, married, a few years ago, a lady somewhat older than himself, who enjoys in her own right about 400*l.* per year, which is paid to them by her Trustees for their conjoint maintenance. The husband is fond of society; his wife being a little *passée* prefers sitting at home, where their life is chequered by those domestic storms which spring up as suddenly as they subside, and prevail, it is said, more or less, in all quarters of the globe. Unhappily, the lady was by birth more highly connected than her husband; hence a constant disparity in tastes and opinions; she had been, also, on account of her personal attractions, a spoilt child, and had acquired almost every accomplishment, excepting the art of governing her temper. She was therefore the Xantippe of her own domestic hearth, where she might have exhausted the philosophical patience of Socrates himself. The husband would gladly have left her, but then her income was the pecuniary chain which bound him, like Ixion, to his wheel of torment. There was—so it appeared to him—no escape, until, one evening, a wily lawyer suggested to him, that he might easily enough shake off his matrimonial burthen, yet still preserve its only advantage—his wife's income. "But how? In what way?" "By getting her shut up," was the reply, "in a madhouse; nothing can be easier, if you only know how to set about it:" whereupon followed a conversation, the tenor of which may be easily inferred from the circumstance, that a few evenings afterwards the worthy husband presented himself at the gates of a Lunatic Asylum in the neighbourhood of London, and asked to see the Proprietor. He is forthwith introduced to him, and gives a very exaggerated and *ex-parte* account of his wife's state of mind, professing, all the time, the most ardent affection for her. Hereupon the Proprietor of the Asylum sympathises with him, and tells him, that the best authorities in lunacy are now convinced, that the disease is most readily curable in its incipient and early stage, and that she should be placed immediately under medical treatment. "And how is this to be done?" The Proprietor rises, goes to his writing-desk, and produces a bundle of printed folio papers. "There (he observes) are the forms for the admission, which may be bought by the quire at any law stationer's. You have to fill up the first page, entering, at the places marked, the particulars required—her Christian name, age, social condition, place of abode, religious persuasion, &c., and direct the order for her reception to me." "This can easily be done," cries the husband, cheerfully. "You must then get two medical men to visit her separately, when she is in one of her paroxysms, who will fill up these certificates on the opposite page; so that there is no difficulty in the matter. When was she last in one of these states?" "Oh!" replies the husband, "she was in a high state of exaltation when I left her, and I shall find her certainly in all her glory upon my return." "Then," said the Proprietor, thoughtfully, "you had better call in a couple of Medical men on your way home. We can receive her here at any time—even at midnight—in fact, noisy patients are better brought at night, it saves exposure in the public streets."

Here, again, we wish that the sections of the Act 8 and 9 Vict. c. c., should be brought closely to bear upon every step of this narrative. Nothing has been done, or shall be done in the slightest degree illegal, and yet, under the very provisions of this Act the lady will be made unjustly a prisoner. "The Sovereign," says Macaulay, "cannot nowadays immure a subject in defiance of the Writ of *Habeas Corpus*." No! but any relation or friend, who will sign such an order as the above, backed by a couple of medical certificates, can do so, and without the interposition of any judge or jury. But to proceed. Upon arriving near his own house, the husband steps round the corner into the shop of an apothecary, and, affecting the greatest distress, tells him that his wife is in a state of mental derangement—nay, he proves it by relating a thousand acts of indefensible violence and irrationality, and winds up his case by stating, that, under the best medical advice, he has been to a Lunatic Asylum, where he has arranged the terms for her admission, and, producing the printed paper, he requests the apothecary will kindly step across, and certify the state in which he finds her. He consents, and they proceed. The parlour door opens, and she stands before them both, flushed and indignant. "What! intrude upon me a strange man in my *deshabille!*" and never wind whistled louder in the shrouds of a man-of-war than did her voice round the corner of that small room. The husband—to satisfy the 45th section of the Act — precipitately retired, leaving the apothecary to deal with her alone, who had not the sagacity to discover that some portion of this *hysterica passio* was perhaps due to a certain quantity of wine, which her husband, anticipating the consequences, had considerately left within her reach. In a soft and silken tone of voice, the apothecary, approaching her gently, says, "My dear Mrs. B., don't you know me?" at the same time endeavouring to pat her playfully on the shoulder. She starts from him with all the gestures of a tragedy queen, flings open the door, and orders him, upon peril of his life, to leave the house! The apothecary, too happy to effect his escape, hastens out of the room, and turning round the corner of the passage, is beckoned by the husband into the adjoining study. "She is in a dreadful state," exclaims the husband. "Very sad," adds the apothecary, and thereupon he fills up the printed Medical certificate, which runs as follows:—

"I, William Dioscorides Cullen, being an apothecary duly authorised to practise as such, hereby certify, that I have this night, separately from any other Medical Practitioner, visited and personally examined A B, the person named in this statement and order, and that the said A B is a lunatic, and a proper person to be confined, and I have formed this opinion from the following facts, viz., that she is labouring under great cerebral excitement, very noisy and incoherent, and appears to be dangerous to herself and to others.

"Name—William Dioscorides Cullen,
"Place of abode— ———street.
"Dated, this Twenty-eighth Day of October, One Thousand Eight Hundred and Forty-eight."

All this (*vide* schedule c. sec. 45) is in strict form. To obtain the second medical certificate the husband crosses the road, and calls upon a very worthy Member of the College of Surgeons, to whom he relates the grievous calamity that has befallen him. He dwells upon the perfection of his wife; if she only had retained her senses; he enlarges upon the deep affection he entertains towards her, and the distress which her removal to an Asylum will give him; he explains that her fatal malady has been progressing gradually ever since the very day of her marriage, and now that the poor creature is so completely estranged from herself that he would hardly know her to be the same person; he thinks her attending a Methodist Chapel imbued her mind with some religious delusions which forbid her leaving her fireside; and he has observed, that at about the change of the moon she has always one of these maniacal paroxysms under which she is now labouring; finally, he implores him to step over the way, and certify according to his conviction, lest she do herself, or him, or some of the servants, some bodily harm during the night. The friendly surgeon consented to see her; but, when the parlour-door was thrown open, and another man unceremoniously walking in, she was literally frantic. She stood before him in the attitude of a fury, her hair hung dishevelled round her neck and shoulders, for she was undressing to go to bed; her face was flushed; her eyes, which were injected, seemed to flash fire from their inmost sockets; and her quivering lips only half-articulated the torrent of invective which she tried to utter. In vain did the surgeon attempt to appease or soothe her; she would hear nothing he had to say, and certainly answered him very incoherently; she said that her husband was not her husband; that she was under the anathema of her family; that she was married and not married; that she should be goaded to kill him first and herself afterwards. In truth, she had the physiognomy and demeanour of a mad woman in the eyes of any person who might not look a little deeper into the secret cause of her excitement, or who had not an opportunity of visiting her more frequently; for, be it observed, that a single and short visit from a physician, surgeon, or apothecary, is sufficient to justify his signing the certificate prescribed by the Act. The surgeon, we need scarcely say, was conscientiously satisfied, and wrote the following certificate:—

"I, Robert Hunter Parry, being a Member of the Royal College of Surgeons, duly authorised to practise as such, hereby certify, that I have this night, separately from any other practitioner, visited and personally examined A B, the person named in the accompanying statement and order; and that the said A. B. is a lunatic, and a proper person to be confined; and I have formed this opinion from the following facts, viz., that she is obstreperous and violent, abusive and incoherent, and is said to labour under religious delusions, and threatens both her own and her husband's life.

"Name—Robert Hunter Parry.
"Place of abode—Great—— Road.
"Dated this Twenty-eighth day of October, One Thousand-eight Hundred and Forty Eight."

We have now all the forms completed which are prescribed for the transference of any one of Her Majesty's subjects into a Lunatic Asylum.

The husband now hastens, with this warrant (if we may so designate it) in his hand, to the proprietor of the Asylum; who looks over it very much as the Governor of the Bastile may

be depicted examining one of the *Lettres de Cachet*, signed by Louis XIV. And is not the document itself, to all intents and purposes, a *Lettre de Cachet?* The person accused of being insane is kept in utter ignorance that such a process is pending,—nor is it necessary to reveal who signed the Order of Reception, or either of the Medical Certificates. On the contrary, it is the general rule in all asylums, to refuse any information on these points; and patients are constantly heard hazarding all manner of conjectures as to who can possibly be the authors of their detention! The proprietor, glancing over the signatures, observes that it is all *en règle;* and forthwith gives orders that a stout Amazonian attendant, and an ex-policeman recently engaged as keeper, shall go with all possible expedition for the refractory lady, taking along with them a strait waistcoat, straps, pair of wrist-locks, &c. With all due diligence—as fast as the Asylum horses can keep pace—the attendants proceed, but do not arrive at the house of the unfortunate lady until she is in bed and asleep. Her attentive servant, being on the watch, opens the street-door quietly, and shows them directly up to her mistress's bed-room. They soon rouse her from her slumbers, telling her she must get up and go with them. "What!" cries she, "are you going to murder me? Help! help!"—but she can only oppose a feeble resistance to her powerful assailants. They soon pull her out of bed, —hurry on her day-clothes clumsily over her night-dress,—and, in accordance with a humane suggestion of the male attendant, that they had better put on the strait waistcoat to prevent her breaking the windows of the carriage and cutting herself, as well as to keep her warm, the coarse brown holland sack is pulled over her, and her hands drawn into its long sleeves, which are secured by tape strings tied three or four times under her arm-pits. In this helpless state, kicking and plunging as well as she could, —calling for help and screaming,—she is carried down and thrust into the vehicle at the street-door. A policeman upon duty comes up to know what is the matter, when the male attendant draws himself up with the air of a man of authority, and, producing his *Lettre de Cachet*, says, "By order of the Commissioners in Lunacy—a mad lady —carrying her away to an asylum." The policeman looks over the printed paper, which he does not understand, supposes that it is all right, and desires them to shut the door and drive away as quietly as possible. Arrived at the Asylum—which the husband has only just left —they alight, and the patient is ushered into a small parlour, where the matron, proprietor, and superintendent receive her. "Where am I," she cries in distraction, "Who are you?" "What are you?" In reply to which, the matron, assuming a winning manner, says, "Poor child! let us take this nasty thing off," (meaning the strait-waistcoat,) which the attendants begin to untie, and, as the sleeves are loosened, and she emancipates her arms from the restraint, "Oh!" she exclaims, "give me pen, ink, and paper—let me write to my sister or brother." "A cup of tea, my dear," says the matron, "will do you more good!" "Oh no!" she ejaculates, "let me see a magistrate, a clergyman—are there no police?" "A shower-bath," whispers the proprietor, "will be of service." "Not yet," interposes the superintendent, "she'll be quiet presently!" And, at length, after a great deal of argumentation, persuasion, and circumlocution, intermixed with remonstrance and some threatening, the poor creature is half led and half carried up stairs, when she might have been put to sleep in a dormitory surrounded by *other* lunatics, had not her husband *generously* been induced by the proprietor (who made an extra charge for it) to allow her a private room, which was about the size of a cell in a common gaol, with a narrow iron bedstead running along the side of the wall, covered with the usual quantity of bedding. Here she was quickly undressed, and, lying down on a harder mattress than she had been just torn from, thoroughly exhausted, she fell into a disturbed and unrefreshing sleep. She awoke in a few hours, and raising her head wistfully from off her pillow—in the grey dawn of the morning—she looked around the narrow room with a shudder; there was no furniture excepting a chair in it, and the window, which was high up in the wall, she perceived was secured with iron bars;—she remembered all that had transpired the previous night, for the fumes of the wine had vanished and the excitement of her over sanguine temperament had subsided, and she sat up in her bed alone, contending with her grief and asking within herself—"Who hath done this?" "Can it be he?" "By whose authority am I here?" Alas! poor lady! These are but vain questions, which it will behove none to answer. A sudden apprehension of some heavier calamity fell upon her, and, in a state of utter bewilderment and dread, she burst into tears and laid her head down upon her pillow with a bursting brain and a breaking heart! Talk of "the rack having been in use in England before the great majority of the nation had the least suspicion of it,"—what excruciating mental tortures have not been inflicted by the cruel operation of this Act of Parliament, (8 and 9 Vic. cap. c.) "The wretch," says Junius, "who suffers on the rack is passive;" but when the mind is so tortured, humanity sinks under the greatest possible amount of suffering.

THE ULTIMATUM OF THE ROYAL COLLEGE OF SURGEONS.

TO THE COUNCIL OF THE NATIONAL INSTITUTE OF MEDICINE, SURGERY, AND MIDWIFERY.

GENTLEMEN,—In addressing the Council of the National Institute, the Council of the College of Surgeons desire to express their regret that they cannot adopt the views set forth in the "suggestions" of Mr. Bottomley as Chairman of the Committee of Associated Surgeons of England.

The Council of the College thinking it unnecessary to consider the details of the measure therein proposed for the amendment of the Charter of the College of Surgeons, are of opinion, that the admission of "Surgeons in general practice" to the Council of the College would, in converting the College of Surgeons into a College of General Practitioners, prove to be injurious to the best interests of the Profession, and of the general Practitioners inclusively. They believe that the College would then cease to be regarded as the Institution, especially designed for the promotion of Scientific Surgery, and that by admitting to the Council others than those who, as surgeons of hospitals, teachers, eminent Practitioners, or original inquirers in Surgery, maintain its scientific character, the Diploma of the College would lose the high estimation which has hitherto induced those preparing themselves for general practice, to seek it *voluntarily* as the best guarantee of their surgical qualifications and professional character.

They cannot, therefore, consistently with the object for which the College of Surgeons was instituted, consent to any proposal for introducing into the Council those who practise pharmacy.

The Council of the College are no less adverse to the proposal of instituting a "National College of Medicine and Surgery," intended, more or less, to supersede the Colleges—Physicians and Surgeons, and the Society of Apothecaries. They are convinced that the proposal of the Chairman of the Associated Surgeons, viz.:—

"That the new College must be independent of all others, and must possess the right of granting diplomas in Medicine and Surgery, which shall entitle the holders to practise in all the departments of Medical and Surgical science, and to fill all Government and public appointments," tends inevitably to abolish those distinctions which have been hitherto beneficially recognised as marking the relative claims of Medical Practitioners to the confidence of the public, and which, by preserving the highest standard of education in those who have the means of attaining it, maintain and elevate the character of the whole Profession. And they especially hold that it would most injuriously affect the interests of every one calling himself a Medical Practitioner to diminish the authority, or contract the influence of the College of Physicians, seeing that the general character and respectability of the Profession not only depends greatly upon the character of those who are distinguished members of it, but that the Fellows of the College of Physicians have ever been distinguished by the same education and training as the gentry of the country, by their learning and attainments in literature, by the aid which they have given to the progress of science, and by their association with the learned and scientific bodies of the metropolis.

Further, the Council of the College, in relation to the amended Charter proposed by the Chairman of the Associated Surgeons, are bound to state, that they have assented to certain "heads," or "principles," agreed to at the Conferences held at the College of Physicians, conjointly with the representatives of the College of Physicians, of the Society of Apothecaries, and of the National Institute, and designed to be incorporated as a Bill for the regulation of the Profession; and, as this Bill is intended to provide for the institution of a College of General Practitioners, they are precluded, by their present engagements, from re-opening the question of any organic reform in the Constitution of the corporate bodies of the Medical Profession.

At the same time, the Council of the College take leave to impress on the attention of the Council of the National Institute, that the College of Surgeons can in fairness be held responsible for the performance of such engagements only under the acknowledgement by the other contracting parties, and, in this instance by the National Institute, of their reciprocal responsibility.

The College of Surgeons consented originally to the institution of a new College as one "for the more efficient performance of the duties confided to the Society of Apothecaries."

That the "principles" of the Bill in question were framed in accordance with this intention is incontestably proved by the provision, that no one shall be registered as a General Practitioner unless he "shall also have been examined and admitted as a Member of the Royal College of Surgeons." If, then, according to the provisions of the projected Bill, no one can be licensed for "general practice" except by possessing a double qualification, that is, letters testimonial from the College of Surgeons, and letters testimonial from the College of General Practitioners—the Council need not point out the inevitable conclusion, that the object of the Bill ever has been, that the qualification in Surgery shall be determined by the College of Surgeons, and the qualification in other branches of Medicine by the

College of General Practitioners, and that it never could have been contemplated to transfer from the College of Surgeons to the proposed College of General Practitioners the *legal right, or any part of the legal right*, of regulating the education of Surgeons, of instituting examinations of their qualifications, and of granting to them letters testimonial of their fitness to practise Surgery.

Nevertheless, it cannot be doubted by the Council of the College, after a careful consideration of the proceedings of the National Institute, in connexion with the Conference held at the Hanover-square Rooms, on the 20th of November, together with expressions reiterated in their Third Annual Report, of August 1849, that it is the intention of the National Institute to obtain, if possible, the right of regulating the education of Surgeons, and of inquiring by examination into their qualifications for practice, in the Charter which they seek to obtain from Her Majesty, for incorporating their Association under the style and title of a Royal College. And the Council of this College feel it incumbent on them to declare that, consistently with their oaths and their duty to the public, they cannot surrender any portion of the rights and privileges which they possess, of being the sole public body in England entitled to regulate the education of Surgeons, and to authorise them to practise Surgery throughout Her Majesty's dominions, and, therefore, the Council feel not only justified, but called upon, to require that the College of General Practitioners shall, in conformity with the practice of the College of Surgeons and the Society of Apothecaries, state in their Diploma or certificate of qualification, the subjects on which their members or licentiates shall have been examined and found qualified, namely, Medicine, Pharmacy, and Midwifery.

Considering, moreover, that the Council of the Royal College of Surgeons have taken steps, which are publicly known to be in progress, for the removal of those grievances declared, both by the National Institute and the Associated Surgeons, to have been the cause of their original formation, the Council of the College might rather have expected that the incorporation of any new medical body, to be endowed with surgical privileges, would have been deemed unnecessary; but, at all events, they will consider it to be their duty to oppose every attempt which may be made, either by the National Institute, the Associated Surgeons, or any other body of gentlemen, to usurp the rights and privileges of the Royal College of Surgeons, whether it be sought to be accomplished by means of a charter or by an Act of Parliament.

Finally, if it were thought advisable that any alteration should be made in the measures projected, and now in progress, for the re-organisation of the Medical Profession, the Council of the College of Surgeons have no hesitation in saying, that they would greatly prefer to the establishment of any new corporate body, that the examinations into the medical qualifications of General Practitioners should be entrusted to the College of Physicians, as more consonant with the dignity and interests of the Profession, and especially of the general Practitioners. And should the College of Physicians and the Society of Apothecaries agree in the requisite preconditions, the Council of the College of Surgeons would cordially concur in a plan for a re-construction of the Medical Profession, which they deliberately and conscientiously believe would best conduce to the peace and permanent well-being of the Profession, whose efficiency is inseparably associated with the needs and welfare of the country.

I have the honour to be, Gentlemen,
Your most obedient servant,
EDMUND BELFOUR, Secretary.
Royal College of Surgeons of England,
5th February, 1850.

PROPOSED NEW REGULATIONS
OF THE COUNCIL OF THE COLLEGE OF SURGEONS, RELATIVE TO THE ADMISSION TO THE FELLOWSHIP OF MEMBERS OF TWENTY YEARS' STANDING.

To admit to the Fellowship, upon payment of the usual fee of ten guineas, those gentlemen who were members of the College at the date of the Charter of Her present Majesty, and of twenty years' standing, who shall be desirous thereof, and shall be recommended to the Council by six Fellows.

That the following be the terms of such recommendation, viz.:—

We, the undersigned Fellows of the Royal College of Surgeons of England, do, from our personal knowledge of the high moral character and professional attainments of A. B., of C., declare, that, in our opinion, he is deserving of the honour of the Fellowship, and that he does not openly trade in medicines. We therefore recommend the said A. B. to the Council, to be admitted a Fellow of the College.

That members in the army and navy be admitted to the Fellowship under the like conditions, their certificate and recommendation being to the same effect, and signed by six Fellows, or by the heads of the Medical Department of the respective services.

That members in the service of the East India Company be admitted to the Fellowship under the like conditions, their certificate and recommendation being to the same effect, and signed by six Fellows, or by the Secretary of the Military Department of the Company.

That members resident in the Colonies be admitted to the Fellowship under the like conditions, their certificate and recommendation being to the same effect, and signed by six Fellows, or by the Governor of the Colony, and certified by the Colonial Secretary.

That the application of every member for admission to the Fellowship, in the manner above provided for, shall be accompanied by a declaration, signed by himself, that he does not openly trade in medicines.

That this Council do, from year to year, admit to the Fellowship, under the foregoing conditions, the members of the College at the date of the Charter of Her present Majesty, as they shall respectively become members of twenty years' standing, until the whole of the list of members at that date shall be gone through.

That when the sanction of Sir George Grey shall be obtained to such proposed application to the Crown, the several foregoing resolutions be made public, in such manner as the President shall direct.

We invite the special attention of our readers to the above series of "Regulations." They differ but little from the terms of the Resolution agreed to a few weeks since by the Council. It will be observed, that the Council do but reserve to themselves the right of *electing* such candidates as may be recommended, in accordance with the terms of their regulations.

These proposed Regulations are intended as concessions to the just claims of the Members, but they are exceedingly imperfect, and accompanied with restrictions that will be found irksome and offensive to a large number of worthy and skilful men who are fairly entitled to the honour of the Fellowship. We accept the Resolutions for what they denote, and what they are worth,—the tardy repentance of unjust judges, and slight reparation for innumerable injuries inflicted upon the great body of the Profession.

The Council must not delude themselves with the idea that those Regulations comprehend the *solution* of the Medical Reform Question. If the Council wish them to be regarded in this light, their publication is an insult to the intelligence of the Profession. The Council are embarked at last in the good ship "REFORM," and they must go with the wind or suffer shipwreck. Their interests will prompt them to throw overboard many old prejudices, in order to come safe into haven. We are resolved that they shall have no peace, until every branch of the Profession whose well-being depends upon their will and movements shall have received ample justice, and are guaranteed the full possession of their invaluable rights.

REVIEWS.

The Zoist, a Journal of Cerebral Physiology and Mesmerism, and their Applications to Human Nature. January, 1850. No. XXVIII. Published quarterly.

The History of Mankind clearly proves that there have, in different ages, existed epidemics of the mind as well as of the body, popular superstitions, which have strangely obscured the understanding and perverted the judgment. The weak in intellect have always been most liable to be affected by the evil influence of credulity, for which reason Lord Bacon truly observed that, "in the opinion of the ignorant multitude, witches and impostors have always held a competition with physicians." Unhappily, however, physicians have sometimes not disdained to change places with impostors; hence Paulus Ægineta tells us that the Arabian physician Rhases dedicated an entire chapter to "professional impostors," with the view of exposing their frauds, and cautioning their misguided disciples against their crafty counsels. The portrait of Thessalus, the Roman empiric, as drawn by Galen, is recognized by Dr. Paris to be the very prototype of the charlatans who, in the present day, practise homœopathy, hydropathy, and animal magnetism, which is now covertly mystified under the designation of "mesmerism" and "cerebral physiology," the latter title being an impertinent assumption, and aiming at insidiously engrafting a repudiated fiction upon a recognized branch of legitimate science. The love of dealing with the supernatural—the principle which suggested to Gœthe the compact between Faust and Mephistopheles—has constantly urged the curious in futurity to transcend the boundaries of ordinary experience. Not more than a couple of centuries ago, one-half of the potentates and philosophers in Europe believed in magic and astrology. Next came the wonders of witchcraft and sorcery; and, although we plume ourselves upon the advancement of science, and flatter ourselves that we are living in a more enlightened age, we are surrounded by superstitions as absurd and incongruous as any which called forth the reprobation of the Roman satirist. It may well be said of us, "*mutato nomine de te fabula narratur.*" Instead of consulting the stars, and asking the astrologer to cast our nativity, the modern metoposcopist fingers our phrenological organs, and reports the cranial indications of our destiny;—instead of consulting the priests who officiated in the temple of Æsculapius, the susceptible votary of modern witchcraft permits the mesmeric oracle to perform the mystic ceremony of "manipulation," as it is called, and consisting in the operator passing his extended digital extremities downwards and upwards at a little distance before the eyes, nose, and mouth, until the most marvellous effects are produced. These, instead of being registered on tablets of marble, are recorded in the *Zoist*—a quarterly journal, the history and objects of which demand special attention.

The Quarterly and Monthly Journals which appear, are, for the most part, presumed to represent, in a peculiar manner, the interests and progress of legitimate science. A new era, however, has arrived in periodical literature. Instead of its fields being set apart, and dedicated to the cultivation of knowledge; and instead of our deriving from them information respecting such new discoveries as may be revealed to us in the pursuit of truth; the arena is now invaded by a host of self-advertising charlatans, who aim only at disseminating particular doctrines which they have an interest — a personal and worldly interest—in disseminating. The *Charlatanerie* of this new self-advertising system is very obvious, although it may, to a cer-

tain extent, impose upon the public. It is well known that the facilities which are afforded by the means of public advertisements are so great, that every impostor who wishes to palm upon the world his belief in any new discovery to which he may pretend, has only to pay a steady advertisement-duty and charge for a given period, and he may, with impunity, trumpet forth the infallible remedies he possesses, and the wonderful cures he has performed; and, by persisting in this course, it is notorious that he will succeed in imposing upon the credulity of ignorant people, and greatly promote his own pecuniary interests. A more ingenious method, however, of entrapping such disciples is at present adopted. Instead of honestly and boldly advertising their pretensions, the founders and apostles of every pseudo science now-a-days, start a quarterly or monthly journal, under the *prestige* of which, a tone of authority is usurped, which appears to give a specious weight to the apocryphal facts and sophistical principles thus surreptitiously enunciated. Hence we have mesmeric, homœopathic, and hydropathic journals. Nor is this novel mode of appealing to public credulity so expensive as might appear; nay, it is an economy rather than otherwise. Take, for example, a quarterly journal, consisting of five sheets pica, with an impression of 750 copies. We may, at a rough guess, say that each number will cost 30*l.*, or 120*l.* per annum; and even supposing not a single copy sold, nor an advertisement paid for, we have a very moderate outlay, compared with the enormous sums which such orthodox Practitioners as Messrs. Morrison, Curtis, Solomon, Holloway, *et hoc genus omne*, spend daily in advertisements. Such journals as these we denounce. They are not legitimate contributions to scientific literature; and their object is as palpable, and as notorious, as the monster advertisement-vans which perambulate Fleet-street and the Strand.

The *Zoist* is one of those empirical quarterly Journals which emphatically belongs to this class. It is put forth solely to advertise Mesmerism. It is an amusing record of pretended miracles, which only tend to show how far human assurance will go in attempting to impose upon human credulity. It contains fictions so palpable, that the very extravagance of their details nullifies their effect. But a Journal established upon the advertising principle we have above explained, does not depend for its support upon public opinion. The Proprietor or Editor, independently of subscribers, pays all expenses, and may perform before the mirror of his own self-complacency any vagaries he pleases, resembling, in a striking manner, the madman described by Horace, who impersonated at once actor and audience:—

> Fuit haud ignobilis Argis,
> Qui se credebat miros audire Tragœdos
> In vacuo lœtus sessor plausorque theatro.
> Epist. ii. 128.

As the Members of our Profession generally, we presume, have never seen the *Zoist*, and are unacquainted with its physiognomy, we may, by way of further preliminary add, that it is a goodly-sized 8vo. Journal, printed on good paper, and in a clear type. It is stitched in a sort of whity-brown Mackintosh wrapper, and adorned with a striking wood-cut representing Dr. Elliotson, disguised as a bearded sage, sitting down between the two Okeys, pondering upon the Book of Fate. The design is beautifully executed, and reminds us of some of the choicest hieroglyphics which are to be found in the Vox Stellarum, or Moore's Prophetic Almanac. Nor is this all. The conception of the picture indicates admirably the contents of the Journal. It is characteristic of a combination between Elliotsonism and Okeyism; between the Mesmeriser and the Mesmerised; between professional sagacity and subjective inspiration. We must, however, here pause and request Dr. Elliotson to descend for a few moments from the empyrean (query, empirical) heights of his philosophy, in order that he may meet us on *terra firma*, for we would fain have "a few words with this learned Theban."

The *Zoist* for January, 1850, opens with an article on "Capital Punishment," or "Killing according to Law;" and which, as the title may indicate, is conceived in an extremely ribald and vulgar spirit, evincing a profound ignorance of the subject in all its bearings. It is, indeed, ludicrous and pitiable, to find Dr. Elliotson arraigning the Secretary of State for the Home Department, the Judges of the land, and the usually constituted juries of the country, for being ignorant of the physiology of the brain, and not apportioning the sentence upon condemned criminals according to the measure of their guilt—weighing the same in the visionary scales of Phreno-mesmerism. The article before us treats the question physiologically, psychologically, phrenologically, and mesmerically; in short, views it in every light excepting the one under which it ought to be considered—viz., the social policy of exacting the *ultimum supplicium* as a warning to deter others from the commission of the like offences. If Dr Elliotson will take the trouble to inform himself upon the subject, he will find, that the statistics of crime irrefragably prove, that the diminution of capital punishments has been invariably followed by a very large increase of the offences previously punishable with death. The question is purely one of social policy; and to select it as a peg upon which to hang a ragged disquisition upon phreno-mesmerism, is a mere *ruse* to append a subject of popular interest to one which Dr. Elliotson has great difficulty in keeping alive at any cost. We, however, at once proceed to the *grand coup* of the present Number,—an attack, by Dr. Elliotson himself, on those professional men who persist in disbelieving Mesmerism; and here, we must say, we regret to find Dr. Elliotson losing that sweet equanimity of temper which becomes his serener nature. "Anger!" exclaims Brutus, "What's anger? 'Twere a brave passion in a better cause!" But Dr. Elliotson is inconsolable, and refuses to be comforted. He, therefore, gives vent to his agony in the following exclamations:—"The Editors of the Medical Journals preserve a *dead* silence upon all the mighty mesmeric facts . . . their hearts are hardened, and they care not for the welfare of their fellow-creatures . . *I feel shame that I belong to the Medical Profession.*" (P. 368.) Poor Dr. Elliotson repudiating his Alma Mater—eschewing his diploma—ashamed that he belongs to the Medical Profession, because he has entered the cloudy sanctuary of mesmerism! Time was when Dr. Elliotson was respected, and honoured, and esteemed; time was when he devoted the great and commanding talents he possesses to the pursuit of a high and honourable profession. But he swerved from the straightforward course which was before him. He was tempted, with gipsy-like credulity, to wander into paths of darkness, which so sadly obscured his vision, that he mistook even his duty as a professor. He converted the wards of the London Hospital, where lay the sick and the dying, into an arena for the exhibition of the Okeys and a set of impostors, whose mountebank tricks distressed the patients, shocked the spectators, and called forth only one feeling of common indignation against the repetition of the grossest outrage that ever was perpetrated within the walls of a charitable institution. Dr. Elliotson was consequently called upon to lay aside his Professor's gown, and resign the Chair he no longer dignified. When, therefore, he has the presumption to talk of his being ashamed of the Profession, we are provoked into the retort, that the Profession has much greater reason to be ashamed of him.

We next, in the Article entitled "Medical Anti-Mesmerists," meet with a curious example of Dr. Elliotson's perversity of reasoning. He insists upon taking a false position, and having usurped the very ground of his adversaries, forthwith he pretends to have achieved a victory in maintaining it. Thus, with something of a savage exultation, he draws a comparison between some two hundred and fifty mesmeric cases, which were attended with no fatal consequences, and twenty-five cases which, unhappily, proved fatal under the administration of ether and chloroform. Now, this is exactly what his adversaries would have predicated; they do not accuse mesmerism of being a sthenic or an anæsthenic agent. They do not suppose it ever cured or killed any person, but allege that the confederated patients of Dr. Elliotson's *séances* pretend to sleep, and talk, and walk about, and writhe their limbs into all manner of contortions; but, like *Puff* in the *Critic*, they are said to have a strong objection to be kept "dying all day;" they, therefore, return home, eat a good dinner, enjoy their half-and-half (being in a mystical state), and are always ready for their work next morning. Die of mesmerism! Who ever heard of anybody being suddenly killed by a flash of clairvoyance? Were such an "untoward event" ever to happen, we think the very magistrates of Middlesex, even, would order a "Crowner's quest," or (what is called) "sit on the body." No, we have no fear of mesmerism—whatever may be its anæsthenic effects—albeit we may meet mesmerisers with their nervous systems surcharged with the mystic fluid. They have never yet, as the Lord Chief Baron would observe, proved to be "dangerous either to themselves" or "dangerous to others;" therefore they are permitted to go abroad without proper conductors. Accordingly, Dr. Elliotson, in contending for the *negative* effects of mesmerism, is arguing, we presume unwittingly, the very case of his opponents. After abusing the Medical Press generally, which we hope may have given Dr. Elliotson some relief, he records, we think very unwisely for his case, the verdict which has been given against mesmerism by professional men, whose opinions are entitled to our respect, and will always deservedly have great weight in society. Thus Dr. Elliotson informs the public that Sir James Clarke did not appreciate the "wonders of the Okeys," and "smiles with pity on those who believe in mesmerism." Dr. H. Holland "considers it folly." Dr. Bright "tells those patients who ask his opinion upon mesmerism that it is all chicanery." Dr. Ferguson "continually discourages its use." Sir Benjamin Brodie, seeing a lady being mesmerised, declared his opinion that it was "all nonsense." Dr. Chambers told Baron de Goldsmid he considered it "all humbug." Professor Christison, of Edinburgh, also "considers mesmerism quackery." Hence it appears, according to the evidence which Dr. Elliotson has himself placed upon record, that the most intelligent, scientific, and experienced professional men in this country, repudiate the doctrines of mesmerism; and although Dr. Elliotson may feel very sore that such is their verdict, from it he cannot in any way escape.

> A falcon, towering in its pride of place,
> Was, by a mousing owl, hawked at and killed—

but no obscure writer in the *Zoist*, with all the vituperation which this journal has at its command, will ever tarnish the reputation, or shake the authority, of men who are an honour to the Profession.

Dr. Elliotson loudly complains that no Medical

periodical will notice him. Dr. Elliotson may find, perhaps, that it is wise at all times to let sleeping dogs lie. We will, however, gratify his ambition, and take occasion, time and opportunity permitting, to examine the so-called science of mesmerism.

REPORTS OF SOCIETIES.

ROYAL INSTITUTION.

We have seldom heard a more lucid or interesting Address than that of Mr. Faraday, a few evenings since, at the Royal Institution, on the "Electricity of the Air." Having alluded, in brief terms, to the progress recently made in the subject of electricity generally, the lecturer commenced the matter under discussion by mentioning that the atmosphere extends far beyond the five miles popularly considered its limit, and that the "empyrean," in which electricity is excited and exists, stretches still further, filling, according to Peltier, the "planetary spaces," and that, in duly studying its amount, we must take this into our calculations;—the obvious fact suggesting itself to the mind, though not mentioned by the lecturer, that disturbances caused, even at such distances, by comets, &c., may have more to do with engendering epidemic diseases than we are, perhaps, aware of. The characters of the electricity of the air were entered into. The Lecturer (with his divining rod in his hand, properly insulated) charged the air of the Lecture Theatre with electricity and brought it down again. A "messenger," —an insulated ball,— was sent up, and examined after descending. By another method,—the old one of a wire,—the same effect was produced; the electricity in one instance, however, negative, in the other—the former—by induction, of course, positive. It was shown, that in the atmosphere a horizontal motion made little difference in the amount of electricity; but a vertical movement at once gave rise to electrical phenomena. The higher the instrument ascended the more electricity became developed.

Mr. Faraday next entered into an account of M. Quetelet's observations, already noticed in the *Medical Times*, in connexion with the subject of cholera. He alluded to the singular fact elicited by the Belgian philosopher, that in summer, in June especially, the amount of electricity in the air is almost *nil*;—the force in the several months being the following:—January, 605; February, 578; in March, falling off suddenly to 200; in April, 147; in May, 84; in June, 47; in some days of this month, as at the time spoken of during the cholera in Paris, when the instruments could not be charged, the amount almost *nil*; in July, much the same on the average of five years, amounting only to 49; August, 62; September, 70; October, 131; November, 219; December, up again to nearly the same as the beginning of the year, 507. It was a "fine thing," Faraday said, for M. Quetelet to prove this, in the able manner he had done, the dawn of some new discovery, possibly, in the law of epidemics. As to the *quality* of the electricity of the air, in 1800 observations it was positive; in only 25 negative; the best observers considering the normal state of the earth negative; the air rendered positive by induction.

WESTMINSTER MEDICAL SOCIETY.

FEBRUARY 9, 1850.

F. HIRD, Esq., President, in the Chair.

FIBROUS TUMOUR OF THE UTERUS.

A letter from Dr. Ogier Ward, addressed to the Secretary, respecting a specimen exhibited by him at the last meeting, was read.

The tumour, which was then exhibited, was attached to the cervix uteri; the organ itself contained a larger one, which had caused a distension and growth of the organ equal to that of the fourth month of pregnancy. The tumour was readily separated from the cyst in which it was contained, except at one or two points, where it adhered, by fibrous bands, to the walls of the cyst, which were studded over with granules of fibrous matter, varying in size, from a millet-seed to a grain of wheat. Similar granules were found in the ovaries and broad ligaments. The left side of the uterus along the line of the broad ligaments, being much thicker than the right, an incision was made into it, which laid open the cavity of the uterus almost in its natural condition, but considerably elongated; thus proving, that the tumour had originated in the substance of the right wall of the uterus, and having grown into the cavity, had produced the same changes in the shape and size of the organ, as an ovum of the same dimensions would have done. The patient, aged 56, never complained of any uterine affection; she died of phthisis.

MALIGNANT DISEASE OF THE OVARIES.

Mr. Greenhalgh exhibited a specimen of malignant disease of the ovary, taken from the body of a female, who died the preceding day. She had been tapped in the linea alba a few days prior to her decease, but no fluid was discharged. Another tapping was practised, with a similar result. For some days after this, she went on well, but suddenly symptoms of collapse came on, and she sunk. The *post-mortem* examination of the body showed the existence of a large ovarian tumour, of a malignant character, on the right side. Mr. Greenhalgh promised to enter more at length into the case on a future occasion.

Mr. Henry Smith then read a paper on Stricture, of which the following is an abstract:—

TREATMENT OF STRICTURE BY THE PERINEAL SECTION.

He stated that this was a subject which had, at all times, been of great importance and interest; but it was especially so at the present time, as the attention of surgeons had been drawn to it lately by one of the most eminent men in the Profession. The object the Author had in view was threefold. In the first instance he should endeavour to show that stricture, which is so obstinate as not to allow the passage of any instrument, and which is so complicated as to resist the ordinary modes of treatment, should be divided by free perineal incision. Secondly, that, as the cutting into the urethra is not unfrequently attended with fatal results, this operation should not be put in force in those cases where an instrument, however small, can be passed. Thirdly, that, in severe cases of stricture, when ordinary dilatation is impossible, caustics, and especially the potassa fusa, will produce the best results, and will frequently obviate the necessity for the knife. He had had under his observation, within the last two years, several cases where the perineal section had been resorted to with the happiest results; he should mention the particulars of two of these to the Society. The first was a case where stricture had existed for a great number of years, and where there was such an amount of disease that fistula existed, through which the whole of the urine was evacuated. The condition of the patient's health, both bodily and mental, was such as to call for some decided plan of treatment. No instrument whatever could be passed into the bladder, and none had been passed through the stricture for some time before. The urethra was, therefore, divided at the point of a catheter passed down to the stricture; the fistulous tracts were laid open, and a catheter retained in the bladder. The patient rapidly improved,—a full-sized instrument could, in a short time, be passed into the bladder, and he was cured in about a month. The second case he should mention was one of a very interesting character, as it strikingly showed the benefits of this operation, and also indicated the danger that was to be apprehended from neglecting to put this operation in force in circumstances where it was absolutely necessary. The patient had had stricture for several years, and applied to his surgeon about two years since. No instrument whatever, after a careful trial of three months, could be introduced. It was submitted to the patient, whether he would undergo the operation of urethrotomy, but he declined, and was lost sight of for some months, when the surgeon was suddenly summoned, and found his patient in the most perilous condition from extravasation of urine. The urethra had given way. By extreme care, however, the man rallied, but was left in a most deplorable condition; his perineum and scrotum were riddled through with fistulæ, and no instrument whatever could be got into the bladder. The operation of cutting through the stricture at the point of the catheter, and of laying open the fistulous tracts was resorted to with the happiest results. In a few weeks the patient was at his business, and could use a large-sized catheter. It was in such instances as those narrated, of which he could mention several more, that the operation was not only justifiable but necessary for a speedy and perfect cure; for, although the proceeding was both difficult and dangerous, at the same time it was more dangerous for the patient to go about with an impermeable stricture, as he was constantly exposed to being suddenly cut off by extravasation of urine, as was nearly the case in the last patient, and as also nearly occurred in another instance, the particulars of which he briefly related. The operation of dividing the urethra through the perineum was only generally considered necessary when no instrument could be passed through the stricture, but latterly it has been recommended by Professor Syme, of Edinburgh, that a free division of the stricture should be thus made, even in instances where an instrument could be introduced. If the operation of cutting into the urethra were free from danger, this would, doubtless, be the readiest and most effectual method of treating those obstinate forms of stricture which Professor Syme had alluded to; but when they recollected that such an operation might be attended with fatal results, they should pause before they followed such a doctrine. He (Mr. Smith) thought that the surgeon was not justified in cutting so freely into the urethral canal in such cases, and he thought that the surgeon should look for some milder means than the use of the knife. He was fully borne out in this opinion by the result of a case in which the operation had been done, and a fatal termination had taken place. He would mention the case it was that of a fine young man, who had suffered for several years from a stricture in the urethra, which was very obstinate and irritable, resisting the ordinary methods of treatment. The patient happened to be under the care of his surgeon, a very skilful man, soon after Professor Syme's work came out. The operation for dividing the stricture was resorted to, a small grooved staff having been first passed through the stricture. The operation was well done; the patient had some bleeding in the night, but went on pretty well for some days, when bad symptoms set in, which rapidly took a low form, and he sunk within a fortnight after the operation, with all the symptoms of irritable fever. At the *post-mortem* examination, no extravasation of urine, nor any inflammation within the pelvis was found, and the bladder was perfectly healthy. This case spoke forcibly against division of a stricture, except when it was absolutely necessary, and he deemed it so only when no instrument could be passed. The question, then, was, had the surgeon any means at his disposal to remedy those cases of stricture which Professor Syme has described as being undilatable, and so obstinate that they cannot be cured by the catheter alone. He considered they had a valuable remedy in the potassa fusa, which, although a troublesome, and perhaps dangerous agent if incautiously used, when employed with proper precautions was of much service, and, it was his (Mr. Smith's) firm conviction, would often obviate the necessity for the knife. Caustic had been much abused by some surgeons, and, therefore, it had fallen into discredit, but this was no argument against the remedy. He was surprised to see that Professor Syme, in his work on Stricture had denied the benefit of caustic, and had stated his belief that it could not remove an organic stricture. But without referring to the numerous cases which had been treated by a Fellow of this Society, and which had been published by him, —he meant Mr. Wade,—he (Mr. Smith) could convict Mr. Syme of an error by the relation of the following case. A gentleman, aged forty, applied to Mr. Smith at the end of November last. He was one of the last patients of the late lamented Mr. Morton, under whose care he had been for some months. He had suffered many years from stricture. Mr. Morton had passed an instrument once into his bladder; but of late he had not been able to get anything through the stricture; and, when Mr. Smith saw him, he was suffering much. He had had some attacks of retention, and his urine occasionally came away only in drops. He tried very cautiously several times to introduce a catheter, but nothing would go in; and he told the patient, that he must be either cut, or have caustic applied; the latter plan was agreed upon. The potassa fusa was used by means of a wax bougie; and, on the seventh application, he passed a No 6 instrument; he can now pass with ease the largest in his case. This instance showed the efficacy of caustic; but he would not resort to it unless it were actually necessary; yet he thought that it should be applied in those cases of stricture which would not dilate by the bougie; where Professor Syme recommended cutting, he felt it was the duty of the surgeon to use the caustic, and he (Mr. Smith) believed that the knife might, to a great degree, be dispensed with, if the potassa fusa were employed.

The period having arrived at which the meeting of the Society usually terminated, Mr. Brown proposed, and Mr. Travers, jun., seconded, the adjournment of the debate, which was carried.

AUDITORS' REPORT.

In the course of the evening, the Auditors' Report was read, from which it appeared that the balance in hand at the commencement of the past year was 44*l.* 17s. 5d.; subscriptions received, 52*l.* 11s.; admission-fees, 68*l.* 5s.; donation, 1*l.*; total received, 166*l.* 13s. 5d. The expenditure amounted to 92*l.* 15s. 2d.; leaving a balance in hand of 73*l.* 18s. 3d. Among the items of expenditure were, rent, 29*l.* 5s.; coffee, &c., 18*l.* 19s. 2d.; publication of proceedings, 23*l.* 19s. 11d.

CANDIDATES FOR OFFICE.

It was then announced that, at the next meeting, a President, two Vice-Presidents, and five Members of Council were to be elected. The Fellows of the Society were invited to nominate candidates for those offices.

Dr. James Bird, in animated language, moved, and Mr. Greenhalgh seconded, a vote of thanks to the retiring President, Mr. Hird, which was carried unanimously.

Dr. Murphy was then nominated as a candidate for the Presidency, and Dr. Garrod and Mr. Clarke for the Vice-Presidencies. Dr. Sibson, Dr. Tyler Smith, Dr. Cormack, Dr. Tilt, Dr. Lightfoot, Mr. Hird, Mr. Travers, jun., Mr. Greenhalgh, and Mr. Walton, were named as candidates for seats in the Council. The election of officers takes place at the next meeting.

THE UNION OF THE MEDICAL SOCIETIES.

The Secretary then read an account of the proceedings of the Council, with reference to the fusion of the Medical Society of London and the Westminster Medical Society, with the view to found one large Society, possessing a library and reading-room. The tenure by which the Medical Society of London holds its property, estimated at the value of 2,000*l.*, forbids its name being changed, and it appeared, that consent had been given that the united Societies should be known by the name of that which holds its meetings in Bolt-court. A willingness to unite apparently exists on all hands. The Medical Society of London has seventy-five paying members. The Report of the auditors, just published, will show the condition of the Westminster Medical Society. The laws of each Society are to be revised, and a new code drawn up; the Fellows of each are to be admitted, and their seniority to depend on the date of their election in their respective Societies: Honorary Fellows of each Society to have a similar rank in the new Society; but not to hold office, unless contributing (to the funds, we presume.) In future, members of the Profession, not students, as heretofore in the Westminster, only to be eligible for election. The Librarian and Treasurer of the Medical Society of London to be retained, (to this there was an amendment on the part of the Westminster Society, that there be two Treasurers, their own being also retained:) all other offices to be declared vacant on the junction taking place. The President of the London Medical Society, it is recommended, should have the chair the first year, and the President of the Westminster the second year. Saturday night is proposed for the meetings. These propositions, with some others, are still under consideration, and some little time may yet elapse, ere the union takes place, as, after the Councils have agreed upon the terms of union, they must be submitted to, and approved by the Fellows of the Societies themselves, at meetings to be specially convened for that purpose.

CORRESPONDENCE.

PRIVATE LUNATIC ASYLUMS.

[To the Editor of the Medical Times.]

SIR,—You express yourself, as a public censor, to be desirous of holding the balance of justice with an even hand; and although I cannot read your recent remarks upon private Lunatic Asylums generally without much feeling of sorrow and disappointment, yet I will not permit myself to believe your intention is otherwise than good. You cannot, however, be very extensively acquainted with the manner in which many such establishments are conducted in this country, or you would have been less sweeping and uncharitable in your remarks, *carefully* drawing the distinction between the use and the abuse of such institutions. You have not hesitated, in those remarks, to avail yourself of the most rare and unusual abuses, in order to denounce the system, and bring it before the public mind arrayed in all its deformities. And if, Sir, I were to sit down with the intention of adopting a similar course, and, extending my observations to every system, profession, or polity in the country, to the legislature, and even to the Constitution itself, I could doubtless paint a very florid picture of such abuses there, as would shortly convince your readers that some speedy remedy is of paramount and indispensable importance for the safety of the country. It is most painful, for example, to behold the present state and workings of all our incorporations, whether they be ecclesiastical, municipal, collegiate, or any other. We cannot take the commonest view of them, without being most utterly disgusted to think that our fellow-men who are filling the very highest offices that can be awarded them, are acting, in a corporate capacity, that part in the stage of life which they would be ashamed and unable to do as individuals. Shall I point out to you the abuses of our ecclesiastical corporations? Shall I tell you how they have succeeded heretofore in taking estates of dying men, under the plea of religion, and appropriating them to their own purposes? Shall I recount to you the long and black catalogue of enormities perpetrated by those very corporations appointed, in the first place, with the benevolent intention of surrounding the weak and defenceless members of society with protection from injury, violence, and fraud? Shall I proceed to point out to you that most of our corporate and collegiate institutions, instead of extending protection and support round the weaker members of that portion of society to which they apply, are resorting to the most crafty and unjust means to keep those members in oppressive subjection, trampling upon their reputations, subsisting upon their money, and exacting even from the Legislature the means by which their injustice may be legalised, in order to feed the insatiable avarice of men who, if they had lived in heathen Rome, would have been excluded from rank and honour by the natural conformation of their minds. But it is useless, as it is sickening, to point out such abuses. I cannot behold the august and noble members of our Legislature, those on whom we are taught to believe our matchless constitution depends for its wise and equable conservation, I cannot, I say, behold such men, dressed out, as I see them, like those monkeys I see in the public streets, perched upon the tops of barrel-organs, and manifesting about as much intellectual capacity as they do, without feeling certain that the abuses of private lunatic asylums, like all other abuses, will never be removed till judgment, justice, and truth take their proper place in the councils of our nation. Till that time arrive, I am persuaded that the only course left for one in your position to pursue, is to try to place the office of proprietor to a private lunatic asylum in such a position as to command the services of those who endeavour, by God's help, to discharge their duties without requiring the very feeble and imperfect supervision which our laws have the power to place over them. You will do much more good to your fellow-creatures, by encouraging the proprietors of such institutions, and giving them credit for fulfilling many painful, difficult, and dangerous duties with judgment and kindness. If you knew what it was to undertake the charge of that part of the society of this country which usually finds its way into the private lunatic asylum, where the worst feelings of our nature have their fling,—where reason and conscience have been so fearfully marred that virtue and truth can scarcely be recognised,—you would, I think, be more charitable towards all proprietors, kindly advising, but not overlooking such as do wrong, and very thankful, in the name of the public, to those who, for conscience' sake, and in obedience to the commands of One, whose authority is higher than man's, are discharging faithfully, and without a desire for gain, one of the most trying and conflicting duties that, perhaps, can fall to the lot of any man who has fully made up his mind to act with integrity. If you knew in how many ways the mind and the feelings of a *resident* proprietor, and particularly a physician, are tried, and how many he has opposed to him, not only amongst his patients, but amongst those to whom he is obliged to look for assistance, if he attempts to make any stand against wilful neglect, or to suppress any wickedness he may be cognizant of, you would certainly uphold more than you do, an office filled to my knowledge by many able, faithful, and philanthropic men, who are actuated by no other motive than a desire to do their duty. If I may be permitted to speak from my own experience only during the last week, I am sure you will extend to me your commiseration, when I tell you, that for acts of gross indecency, general unfaithfulness of conduct, I have been obliged to discharge from my house my superior male and female attendants, being left, at the shortest notice, without the services of these functionaries, and that at a time of more than usual domestic anxiety. I can faithfully assure you, from my own experience, that there are with all these, and many other difficulties to contend with, many private asylums in this country, the orderly conduct of which would put to shame the establishments of many private individuals, who have no such formidable impediments to domestic order to contend with. I know nothing of Mr. Ogilvie, nor will I uphold any man who acts unlawfully, whether the law he infringes be a good or a bad one. But, you must remember, there is no law to regulate baths in lunatic asylums; and one man has as much right to have them moveable, as another has to have them fixed. You ought not, therefore, to have used this point to turn it against one who is already fallen. I think, also, his explanation how the egg got into the bath, should have drawn forth some expression of sorrow from you, that you made a kindly-intentioned act of a proprietor towards a weak patient to appear in an odious and contemptible light before the public, for you have no right to assume that the bath in question was the only one in the establishment.

With what kind of justice can you affirm, as a rule, that in these institutions "Mammon has triumphed over Mercy?" I expect, if you were to go a little more into business, you would not have much trouble to discover the fact, that many men, having no other than the most honourable intentions, have found themselves, after a few years, shorn of all the property they previously possessed, after having embarked in these responsible undertakings. Ask Mr. Horner how many thousands he sunk for ever at Denham Park.

Your remarks upon mechanical restraint are calculated, in a similar manner, to betray the public into the idea that the rule, and not the exception, is to confine patients with strait waistcoats and hobbles. Probably your own experience has told you there is not even a use for such barbarities, and that, not even as an exception, they are to be resorted to. If this is the case, perhaps you will inform me what I must do in the case of a delicate young lady, who will not hesitate to indulge in the practice of masturbation before my face. Is it merciful or is it cruel to secure the hands of such patients, till the excitement has passed over. Perhaps you will instruct me, what course is the best to pursue with a patient who takes it into his head to stand on his legs all night, so that they become painful and much swollen. Is it kindness or not to secure such a one by a strap in the recumbent posture during the hours of sleep? These are questions hard to be answered by expedient men, who feed the ignorance of the public, whose minds are constantly misguided by such remarks as those contained in your Journal; instead of which they should know that there are cases, and plenty of them, even in Hanwell, and the other large county asylums, which are placed almost constantly under mechanical restraint of some sort or other.

Having made these few remarks, which suggested themselves as I read your observations upon the abuses of private Lunatic Asylums, I shall conclude by observing, that I think you are in justice bound to speak more faithfully upon the real state of the case, and not allow prejudice to carry you away from the truth, the whole truth, and nothing but the truth.

I remain, Sir, your faithful servant,

A PHYSICIAN AND RESIDENT PROPRIETOR.

Jan. 28, 1850.

DR. BRINTON ON THE PHYSIOLOGY OF THE ALIMENTARY CANAL.

[To the Editor of the Medical Times.]

SIR,—In your Journal for Feb. 2, is a review of Dr. Brinton's work on the Physiology of the Alimentary Canal. It appears that Dr. Brinton explains the symptoms usually attributed to *inverted* peristaltic action, by the supposition, that the ordinary peristaltic action continuing a reflex current is established, when the fluid contents of the intestine are prevented from passing onwards by any mechanical obstruction.

Does Dr. Brinton deny the occurrence of antiperistalsis in any case?

I remember attending a patient some years ago,

in whom, after the ordinary symptoms of enteritis, irritability of the stomach, with constipation, came on. Other remedies failing, a turpentine injection was administered per anum, which came up at his mouth within ten minutes after it was administered. Will Dr. Brinton's theory account for the above fact? There could not have been any mechanical obstruction.

I am, Sir, your most obedient servant,
R. U. WEST.

Alford, Lincolnshire, Feb. 9, 1850.

APPARATUS FOR FUMIGATING THE SCALP, IN CERTAIN CHRONIC DISEASES OF THAT REGION.

[To the Editor of the Medical Times.]

SIR,—Will you do me the favour to insert this note in an early number of the *Medical Times?*

Several Practitioners have written to me, for the purpose of ascertaining where they could procure an apparatus for the application of vapour to the scalp, described in a work which I have recently published on "Diseases of the Skin of the Exposed Surfaces." Through an oversight I did not give the address of the surgical instrument-maker from whom it might be procured; but I hope now to rectify the omission by stating, that the apparatus may be had at Mr. Ferguson's, 21, Giltspur-street, City, surgical instrument-maker to St. Bartholomew's Hospital.

The vapour apparatus is extremely simple. It consists of a tin jar, about ten inches by four, with a conducting tube, on which is placed a stop-cock, for the purpose of diluting the vapour, or turning it off, and an elastic cap of vulcanized India-rubber, which fits closely to the head, so as to prevent the vapour from escaping. The great majority of diseases of the skin are constitutional, and those of the scalp are not an exception to the rule. Yet every Practitioner is familiar with the difficulty of removing the latter by the unaided influence of constitutional treatment.

Favus, (the *porrigo favosa* of Willan,) for example, which is one of the most unsightly, as well as the most inveterate of the eruptions of that region, may be temporarily relieved by tonics and fomentations, and the skin even made to appear clean and healthy; but the *virus* still remains, and, consequently, the "cure" will be but of short duration. In this, as in other inveterate diseases of the scalp, of constitutional origin, the skin, from the force of habit, adapts itself to the morbid condition, which it retains, with singular tenacity, against all the usual methods of treatment.

In all such cases, the application of vapour, simple or medicated, as the case may require, to the diseased scalp, will be found a very efficient remedy. Where the object is, to *alter the vitality of the parts*, it can be done more effectually by the repeated application of stimulating vapour (the skin being previously cleansed with any detergent wash) than by the employment of caustic lotions or ointments. Indeed, greasy applications of every kind may be advantageously dispensed with in the treatment of diseases of the scalp.

That variety of baldness, which is the result of atony, or disordered nutrition of the hair-follicles and bulbs, will be materially benefited by the use of the vapour apparatus.

THOMAS BURGESS, M.D., &c.
12, Half-moon-street, Piccadilly,
Feb. 8, 1850.

THE MEDICAL DIRECTORY FOR 1850.

[To the Editor of the Medical Times.]

SIR,—I am well aware that the compilation of the "Medical Directory" must have involved a tremendous labour; but at the same time I must say that, in some instances, it has fallen short of all that it proposed to accomplish. When the Publishers issued the "circulars" to be filled up, they therein stated, that no Degree would be noticed, unless the University whence it emanated was stated, and that every published work of any physician, surgeon, &c., would be inserted. Since, however, I received the Directory, I find that, by looking through its pages, I can discover many instances in which the *first* and the *latter* propositions are neglected. For proof, see "Little, Robert, Wolverhampton, A.M., M.D., 1824." We are here totally in the dark, as to where Dr. Little procured his Doctorate. In my own case, as I happen to be an author, I returned a list of my publications, and not one of them is appended to my name in the Directory.

Now, I by no means state this as a grievance, for I don't care about the omission; neither do I believe that it was wilfully done. I am disposed to view it as an oversight, and my sole reason for addressing you on this subject is merely to show that, in the compilation of such a disjointed and unconnected work, the very greatest diligence is absolutely requisite to make it correct on every point.

February 4, 1850. A FRIEND.

CONVENTION OF POOR-LAW MEDICAL OFFICERS.

[To the Editor of the Medical Times.]

SIR,—Will you do me the favour to correct, in your next number, a trifling inaccuracy which occurs in your report of the interview of the deputation of the Poor-law Medical Officers with the Poor-law Board?

I stated, that, in my opinion, the drugs which are required for the sick poor should be found by the *Union* (not, as you have reported, "by the *Government.*")

The salaries of the Medical Officers might, with great propriety, be paid by the Government out of the Consolidated Fund, and the whole of their time should be devoted to the public service.

As the health of the labouring classes affects the general welfare of society, good and prompt medical relief should be furnished gratuitously to all persons who are unable to pay for it. If the labouring population could have ready access to a district Medical Officer when suffering from sickness, without submitting to the degradation of becoming paupers, I do not think the privilege would be abused. The great facility which all classes now have of obtaining medical advice at the hospitals and dispensaries is injurious to the morals of the people; whereas, if the State were to pay district Medical Officers, the necessitous poor would have at all times immediate medical assistance, and the dispensaries and the out-door relief at hospitals (which are now so much abused by well-dressed ladies and gentlemen) might be dispensed with. The money which would be thus saved might be judiciously expended in enlarging the hospitals for the accommodation of a greater number of in-door patients, or in increasing the number of such valuable institutions.

4, Alie-place, Feb. 10. JOHN LIDDLE.

MEDICAL REFORM.

[To the Editor of the Medical Times.]

SIR,—While thanking you for the space allotted to my letter in your Number of last Saturday, I must beg again to trespass on your columns. If, as you state, there are so few who take an interest in Medical Reform, it would be better that the subject should be entirely dropped, for the necessity which is only felt by a very small number is scarcely worth attending to. But I cannot agree with you in this opinion, and the deduction from it, viz., that a Journal devoted exclusively to the question of Medical Reform would meet with inadequate support; the Petitions which have been annually sent to Parliament, and the letters which have, from time to time, appeared on the subject, in the Medical Journals, would seem to show the contrary. Were the Journal of a moderate size, published at a reasonable price, and, above all, conducted in an *impartial* manner, I am fully persuaded, that, when time came for its discontinuance, it would be found to have paid its expenses, with perhaps even a small profit; nor is this a rash expectation, when we consider that there are nearly 30,000 medical men in England, Scotland, and Ireland. There are a large number of practitioners who never take in a weekly Medical Periodical; but circumstances lead me to believe, that many of this class would readily subscribe for a year to a Medical Reform Journal, in whose pages they could have an opportunity of explaining their sentiments upon the question, and of reading those of others in return.

I must express my regret, that the Medical Reform Society of Manchester should, as they appear to do, confine their idea of Reform merely to the facilitating the requisition of Fellowships for the Profession, of which few would, probably, be one whit the better. This is a trifling unworthy of Manchester men, and only fit to be shown in that city where numbers of men are to be found exhibiting a childish glee at their button-holes being adorned with the bauble called the Riband of the Legion of Honour. Why should not this Society, either alone or in conjunction with others, undertake the publishing of such a journal as I have proposed? Let it not be frightened by imaginary lions in the path. If, in all the chief towns, a respectable agent be appointed, whose duty it would be to solicit support from the medical men of the town and district, success would be certain.

By the term Medical Reform, should not be understood merely the improvement or re-construction of our existing Medical Institutions; for, although the three questions alluded to in my former letter would be those which should be first discussed and settled, there are others which it would be well to take opportunity of throwing some light upon. What course of studies (from first to last) was best suited for those intending to enter our Profession might be considered, and some code of rules might be suggested to regulate medical etiquette, promote more cordiality among medical men, and lessen the chances of unpleasant occurrences taking place among them.

You have liberally offered to insert in the *Medical Times* such remarks regarding Medical Reform as may be sent to you; but scattered suggestions, appearing at varied intervals in a periodical which is chiefly occupied with other matters, do not strike the mind with the same force, or admit of the same full comparison which they would do if they appeared in one devoted to a single subject; it is for this reason that I still wish to see an exclusively Medical Reform Journal started. Should, however, none be found willing to undertake its publication, there is another, though less perfect manner, in which the matter might be managed. To the *Medical Times* there might be, once a month, a Supplement added, which might be called the Medical Reform Supplement, and it might be conducted in a similar manner to that proposed for the journal; your arrangements for printing the *Medical Times* would, I suppose, enable you to produce such a Supplement at a much less expense than a new journal could be conducted at. Besides the copies of this Supplement, which would be supplied to your regular subscribers, there should be others on sale, at a penny or two pence; and you might also solicit from your subscribers, and other friends of Medical Reform, donations towards the expenses of this Supplement, and of the carrying out of the Medical Reform question.

I am, Sir, your obedient Servant,
GEORGE FEARON, M.D.

Birmingham, January 31, 1850.

HYBERNATION OF ANIMALS.

[To the Editor of the Medical Times.]

SIR,—I have just read, in the last Number of the *Medical Times*, Feb. 2, page 88, the following passage, which being contrary to the usually received opinion concerning the changes which animals undergo during hybernation, and at variance with the experiments of physiologists, I beg permission to make a few remarks on the subject from my own observations.

The passage alluded to runs thus:—"With hybernating animals, Reynault found less oxygen of course consumed. They give off little carbonic acid, absorb oxygen and nitrogen to such an extent, that *they increase in weight, actually fatten on sleep!*"

About three years ago I watched very attentively the change of condition, with regard to weight, in the *Myoxus Avellanarius*, during its hybernation, but am sorry I cannot now find the notes I took on the subject. However, I accurately weighed the creature without disturbing its torpor, nearly every morning, for the space of about six weeks previously to the termination of its sleep, and found its weight gradually diminishing. During the above period it lost from 25 to thirty grains. I cannot be exact, as I am writing from memory; but of the fact of loss of weight I am certain, and am now surprised to find the assertion, that animals, during hybernation, not only increase in bulk, but fatten. Prunelle found that bats lost 1-32 of their weight between the 19th of February and the 12th of March. It is generally known, that during hybernation a part of the fat formed in the autumn is consumed to nourish the body. I found, likewise, that defecation went on slowly, but regularly, during the winter.

I cannot look upon hybernation as sleep, in the usual acceptation of the term. I regard it as a very different phenomenon, and one *sui generis*. Some organs in animals may be said to hybernate; that is, their principal function is inactive during winter, whilst, in other creatures, the whole system puts on this peculiar condition.

I am, Sir, your obedient servant,
J. W. MOSES, M.D.

St. Asaph, Feb. 2, 1850.

POOR-LAW "LIBERALITY."

[To the Editor of the Medical Times.]

SIR,—The cholera visited my district and the neighbourhood. The Medical Officers of the Poor-law were ordered by the Guardians to attend to all cases of cholera, and were to be allowed two guineas per week extra for such services; a specific contract which required an answer of acceptance, and subject, by agreement, to dismissal at seven days' notice. This continued in force seven weeks, and the sum was duly paid. My township is densely populated; contains hordes of Irish; is badly drained, worse ventilated, and is a hot-bed of fever and infection at all times. To remedy this evil, and to prevent the spread of disease, and *improve* the condition of the people, a town's meeting was held, at the suggestion of the Board of Guardians, and I was ordered to attend the relieving officer of the district and the inspector of police; to make a house-to-house visitation and inspection; to inspect drains, all nuisances and grievances in the township, and to order the same to be removed.

Now, Sir, all these orders were promptly and efficiently attended to. I was at the beck and call of the inhabitants, the police, and the Guardians. I was distinctly told, in a letter from the Board, to attend to all these things, and that I should be remunerated at a future day; that the amount of remuneration should lie with them. Well, Sir, cholera is gone; the village and district is improved, and I naturally thought the time was come for me to be paid for my services; and, at the suggestion of the Chairman of these Guardians, I sent in a bill—a reasonable bill—of charges for the work done. He told me, he thought every man worthy of his hire, and it was only right. A special meeting of Guardians was called to consider and adjudge; and this day, I have, to my astonishment, received a letter from their clerk, informing me, that they will not pay my bill, and that *they* think I was sufficiently paid by the seven weeks' pay for cholera. Here are *two* distinct contracts, yet these clever fellows want to evade.

Now, Mr. Editor, to the point. Having given you my case, with its particulars, will you kindly give me your advice how to proceed. Can I put them in the County Court? or can I proceed against them by law? or can I proceed against this township, as the overseers and rate-payers were cognizant of the whole of the proceedings, and sanctioned the order of the town's meeting for the visitation? &c. &c.

J. A. P.

[It appears to us, that the Board of Guardians, by issuing an order on their officer to make a house-to-house visitation, &c., and by making to him a promise of remuneration for such service, took upon themselves the responsibility of the resolution passed at the town's meeting, and have contracted a debt which the Medical Officer might recover by proceedings in a County Court. We should, by all means, recommend J. A. P. to join issue with the Board of Guardians.—ED. *Medical Times.*]

PREMATURE BIRTH.

[To the Editor of the Medical Times.]

SIR,—On Saturday, the 2nd of February, I attended a young woman in her miscarriage, who was a few months advanced in pregnancy with her first child. The child was born alive; it measured 13 inches in length, and weighed 1lb. 11oz.; it lived 38 hours. The hair and nails were perfectly formed; the eyes opened; it cried lustily, and swallowed small quantities of milk and water.

On closely questioning the mother, she stated that she had been unwell on the two last days of June and the two first of July; that she first had connexion with her husband on the 14th of July; that she was again unwell for one day at the end of the month. She, therefore, became pregnant between the 14th and the end of the month, and so could not have been more than six months and a half advanced.

I am aware, Sir, that there are many cases on record of children living for some time when born at six months and a half, but I can find none in which the length and weight were so small at this period; indeed, they very nearly approach the measurement given in a case (*Med. Chirurg. Review* for July, 1844) in which it was supposed that the child had only reached the fifth month of intra-uterine existence, viz., twelve inches in length, and nearly two pounds in weight.

In the recorded cases of children being born alive before the sixth month, I either find the measurements omitted, or corresponding to a later period. Surely, in the early months, these measurements must be a better test of the age of the child than the statements of the mother, or the calculations of the medical man.

I am, Sir, your obedient Servant,

WARREN FINCHAM.

5, Spring-gardens, Feb. 6, 1850.

CHLORIDE OF ZINC FOR THE PURIFICATION OF SHIPS.

[To the Editor of the Medical Times.]

SIR,—I only met with the Number for the 29th ult., of your very valuable paper a few days ago, in which there is a question asked by a "Young Naval Surgeon," as to the best means of destroying the smell of bilge-water in ships. It may not, perhaps, be presumptuous in me to offer an opinion, and the results of experience, on a subject which has always interested me much ever since I became exposed to the disagreeable and injurious consequences of confinement where such exhalations prevail, and one of such great importance to a Medical man as regards its influence on health. I can conscientiously assert, that of all the various means I have seen employed to remedy this evil, such as fumigations, chloride of lime, and frequently allowing clean water to run into the ship, and then pumping it out, &c., not one ever accomplished the desired object; the intolerable stench invariably returning almost immediately, with all its attendant miseries of nausea, vertigo, dyspepsia, diarrhœa, &c. I am speaking now, previous to 1845, when I first became acquainted with the solution of the chloride of zinc, of Sir William Burnett's patent, and since which time I have had, not only frequent opportunities of testing its efficacy under different circumstances on several stations, but have as well heard the reports of others who have used it, and were as sceptical of its being successful as I was before trying it. If properly used, I have never heard of its failing in one single instance; but it must be particularly observed, that, unless the purifying process is done properly, disappointment may result. To do this, the holds should be thoroughly cleansed, (especially that part intended to contain the salted provisions,) the limber boards to be taken up, the limbers dried, and the solution of the chloride of zinc, diluted to the proper strength, thoroughly injected by means of a small fire engine or force pump, over and into every part, where it should be allowed to remain at least forty-eight hours before it is pumped out. It may be as well, now and then, to throw a bucketful down the pump wells, but this is all that will be required, perhaps for a year or two, when it may be found necessary to repeat the operation.

The relief experienced by the dispersion of this enemy to all comfort on ship board, has invariably been hailed as a great boon by every one—but to the professional man it is doubly interesting, as the fact is now established beyond all doubt, that it exerts a specific influence on some diseases, which may be ascribed to local causes, *i. e.*, erysipelas, sloughing ulcers, fevers, &c., besides which he will see many purposes to which it may be beneficially applied; and were it more generally used, we should not so often hear of those frightful outbreaks in crowded and ill-ventilated places, sweeping off its victims by scores, and only ceasing when no further agents for its virulence remained, or some hygienic means have been adopted to stop its ravages. Should the "Young Naval Surgeon" be sent in the course of his services, to some unhealthy or intertropical station, and use the means which I have proposed to prevent these noxious exhalations, I am convinced he will have great reason to congratulate himself on the results, in the increased comfort and health of all under his charge.

I fear that I have trespassed too much on the columns of your valuable paper, Mr. Editor, but my sole object has been to prevent a similar infliction of such miseries as I have endured; and I trust that it may prove the means of removing what I conceive too often proves to be the origin of many diseases on board ships.

Yours &c.,

CHIRURGICUS.

Jan. 31, 1850.

MR. SIMON has been re-elected Medical Officer of Health for the city of London. An attempt was made to raise his salary from 500*l.* to 800*l.* a-year. The proposal was referred to a Committee to report on it.

BAHIA.—Yellow fever is raging here fearfully, and the mortality is very great; almost every patient admitted into the British Hospital dies. The physicians have recommended that the shipping be scattered, and every vessel be its own hospital. The burial-ground is almost full.

HEALTH OF LONDON DURING THE WEEK ENDING FEBRUARY 9.

The number of deaths registered in the week exhibits a considerable decrease on the returns of the last two months, December and January, during which the deaths were usually above 1050, and in one week were 1156. The result is also favourable as compared with the average, corrected for increase of population, of corresponding weeks in ten previous years, 1840-9, which is 1144, showing a decrease of 187. The sudden decline in the mortality from diseases of the respiratory organs is remarkable; bronchitis, pneumonia, and asthma have numbered in the last three weeks successively, 237, 234, and 165 deaths; the average for last week, derived from returns of the same week in ten years, is 187, or if corrected for population, 204. But the deaths from phthisis (or consumption) have scarcely varied; they have been in the last three weeks 128, 137, and 135 respectively; the average of last week for this disease is 155. The deaths enumerated in the zymotic or epidemic class of diseases were 152; the corrected average is 215. Small-pox was fatal last week to 8 children, scarlatina to 11, hooping-cough to 36, measles to 18, all of these epidemics being under the average, and the first two being much less fatal than usual. Diarrhœa was fatal in 20 cases: in the corresponding weeks of ten years, the deaths from it have ranged from 3 to 32, and show a decided tendency to increase in later years. From typhus there were 27, a comparatively light mortality from this cause. From erysipelas 10; from cancer 17 deaths, of which all except three occurred to women. In two persons fatal disease is stated to have been the result of intemperance The death of a woman of 47 years, which occurred in January, was accelerated by "destitution and exposure to extreme cold." She had been previously removed to Bethnal Green Workhouse.

The mean height of the barometer in the week at the Royal Observatory, Greenwich, 29·457. The mean temperature was 44°, showing an excess of 10·7° on the average of the same week of seven years. It was higher than the average throughout the week. On Sunday the mean temperature was 12° above the average, and on Friday and Saturday 14° above it.

In the Registrars' reports Mr. Leonard of Charing-cross (sub-district) reports the death of a boy of 8 years from "gastritis after eleven days' illness, having been seized suddenly with intense pain, vomiting, and purging, after eating some pie-crust picked up in the streets." He further adds, that "this child and another (who partook of a smaller quantity) were similarly affected. The friends of the former attributed his symptoms to a fall, but the fact was communicated on the day of his death, and a *post-mortem* examination proved that he had been poisoned. The other child is slowly recovering."

The deaths in the several hospitals of London occurred as follow:—

GENERAL.			
St. George	...	...	2
Westminster	...	...	0
Charing-cross	...	...	3
Middlesex...	...	...	1
University College	...		0
Royal Free Hospital	...		0
King's College	...	...	3
St. Bartholomew...	...		2
London	...	...	4
Guy's	...	...	18
St. Thomas	...	...	13
MILITARY AND NAVAL.			
Royal Hospital, Chelsea (South)	...	...	0
Royal Hospital, Greenwich (East)	...	...	14
Royal Military Asylum			0
Coldstream Guards Hos.			0
Grenadier Guards' Hospital	...	...	0
Royal Ordnance	...	...	0
Dreadnought Ship	...		2
LUNATIC.			
Kensington House	...		0
Munster-house (Fulham)			0
Normand-house (Fulham)			0
Otto-house (Fulham)	...		0
Sussex & Brandenburgh-house (Fulham)	...		0
Blacklands-house	...		0
Northumberland-house			0
St. Luke	...	...	0
Miles'	...	...	0
Warburton's	...	...	0
Lunatic Asylum, Bow	...		3
Bethlem	...	...	0
Lunatic Asylum, Brixton			0
Retreat, Clapham	...		0
New County, Wandswor.			3
Peckham House	...		2
Camberwell House	...		0
LYING-IN.			
Queen Charlotte's	...		2
British	...	...	1
City of London	...	...	3
FOR CONVICTS.			
Hospital Ship, Unité	...		0
Penitentiary Hospital, Millbank	...	...	0
FOR PARTICULAR CLASSES.			
Female Servant Invalid Asy., Stoke Newington			0
German Hospital...	...		0
Freneh Hospital	...	...	0
Portuguese Jews' Hospital	...	...	0
German Jews' Hospital			1
FOR SPECIAL DISEASES.			
Small Pox	...	...	0
Fever Hospital	...		0
Lock	...	...	0
Consumption, Brompton			1

MORTALITY TABLE.

Deaths in the Week ending Saturday, Feb. 9, 1850.

(Metropolis.)

Causes of Death.	Total.	Average of Ten Weeks.
All Causes	957	1048
Specified Causes	949	1042
Zymotic (or Epidemic, Endemic, and Contagious) Diseases	152	196
Sporadic Diseases:		
Dropsy, Cancer and other Diseases of uncertain or variable seat	44	58
Tubercular Diseases	170	187
Diseases of the brain, Spinal Marrow, Nerves, and Senses	125	128
Diseases of the Heart and Blood-vessels	31	29
Diseases of the Lungs, and of the other Organs of Respiration	175	207
Diseases of the Stomach, Liver, and other Organs of Digestion	66	62
Diseases of the Kidneys, &c.	11	7
Childbirth, Diseases of the Uterus, &c.	6	10
Rheumatism, Diseases of the Bones, Joints &c.	8	7
Diseases of the Skin, Cellular Tissue, &c.	...	1
Malformations	3	3
Premature Birth and Debility	22	19
Atrophy	27	14
Age	56	72
Sudden	8	13
Violence, Privation, Cold, and Intemperance	45	23
Causes not Specified	8	18

The following is the number of Deaths occurring from some of the more important special causes:—

Apoplexy	13	Heart	27	Phthisis	135
Bronchitis ...	84	Hooping-cough	36	Pneumonia ...	69
Cholera.....	...	Hydrocephalus	23	Scarlatina	11
Childbirth	4	Influenza	2	Small-pox	8
Convulsions...	49	Liver	9	Stomach	8
Diarrhœa	20	Lungs	6	Teething	10
Dropsy	13	Measles	18	Typhus	27
Erysipelas ...	10	Paralysis	31	Uterus	1

BIRTHS AND DEATHS.

	Births.	Deaths.	Births over Deaths.
Males	785	477	308
Females	712	480	232
Total.....	1497	957	540

METEOROLOGY OF THE WEEK.

Day.	Mean of Barometer.	Mean of Thermometer. Dry.	Ditto. Dew Point.	Difference between the Mean Temperature of the day and the same day on an average of 7 years.	General Direction of Wind.		Rain in Inches.	Amount of Horizontal Movement of the Air.	Electricity.*
Sunday	29·712	46·7	40·3	+ 12·3	A.M. W.S.W.	P.M. W.S.W.	0·00	Miles. 190	No electricity has been shown throughout the week.
Monday	29·793	42·0	37·7	+ 8·0	S.W. & S.W.	S.W. & S.	0·00	120	
Tuesday.....	29·342	43·4	36·4	+ 9·8	S.	S.W.	0·20	390	
Wednesday.	28·943	41·9	31·6	+ 8·6	S.S.W. & W.	W.	0·00	228	
Thursday ...	29·402	40·1	34·3	+ 7·5	W.	W.	0·00	265	
Friday	29·564	47·0	43·5	+ 14·4	S.W.	W.S.W. S.W. & W.S.W.	0·03	295	
Saturday ...	29·416	47·2	42·4	+ 14·2	S.W.	S.W.	0·00	275	
Means ...	29·457	44·0	38·3	+ 10·7			SUM 0·32	SUM 1763	

* In this Column, A. stands for Active; N. for Negative; and P. for Positive.

MEDICAL NEWS.

King's College Hospital.—During the past year, 22,309 patients have been received, including 1261 urgent cases admitted into the wards. A debt, amounting to nearly 530*l.*, has been incurred, partly in consequence of the expenses caused by the ravages of the epidemic.

Westminster Hospital.—Mr. Hale Thomson having resigned the Surgeoncy to this Hospital, Mr. B. Holt has given up the Assistant-Surgeoncy, in order to be eligible as a candidate for the Surgeoncy. Mr. C. G. Guthrie and Mr. Holthouse are candidates for the Assistant-Surgeoncy. Mr. Brooke, who sought, some time since, for the appointment, declines being a candidate on the present occasion; the Committee having unanimously decided in favour of the claims of Mr. C. G. Guthrie, who formerly held that appointment, and whose chance of election is very great, Mr. Holthouse's connexion with the Hospital being merely by the medium of the School of Medicine, we believe. We have heard, since this paragraph was in type, that Mr. Holthouse has resigned, and, consequently, Mr. C. G. Guthrie will be elected without opposition.

London Fever Hospital.—The compensation money for the old Fever Hospital at King's Cross amounted to 20,000*l.*; 19,438*l.* 2s. 9d. of which was spent in building the Institution in the Liverpool-road, Islington. The number of patients admitted last year was 714,—a great diminution from the number in 1843, when 1462 cases were received. The average number per month, admitted last year was 54. Of the 714 patients, 586 were cured, 4 sent to other hospitals, 106 died, 18 remaining under treatment. The income for the last year was 2754*l.* 7s. 4d.; the expenditure, including the investment of 750*l.* in the 3 per Cent. Consols, amount to 2,696*l.*; leaving a balance of 58*l.* 6s. 4d. in the hands of the Treasurer.

Northern Dispensary.—Mr. Davis has been elected one of the Surgeons to this Dispensary.

German Hospital.—The large sum of 1784*l.* was subscribed as donations, and 54*l.* as annual contributions in behalf of this Institution, at the annual dinner held on the 7th inst.

Artillery Company of London.—Her Majesty has appointed Dr. Henry Jeaffreson to be Physician, and Messrs. W. W. Cooper and Law to be Surgeons, to this honourable corps.

Naval Appointments.—Assistant-Surgeons G. Gordon (1846), and E. W. Pritchard (1846), to the Asia, 84, flag-ship.

The Medical Officers of St. Luke's, Chelsea.—Mr. Warder and Mr. Keen, the Medical officers of this parish, made an application to the Guardians for additional remuneration for their services during the late epidemic. Mr. Warder stated, that he had attended 3199 cases of sickness, including 72 of cholera, and many of diarrhœa; the gross number exceeding that of 1848 by 961; and of 1847 by 1308. Mr. Keen had been obliged to engage an Assistant, and had incurred other expenses, besides suffering in health and private practice. A proposal was made to pay each Surgeon 15*l.*, (!) but was repudiated by 9 votes against 7. Liberal-minded guardians!

Edinburgh.—On the 5th of February, Dr. Forbes Winslow, Editor of the *Journal of Psychological Medicine*, was balloted for and duly elected a Fellow of the Royal College of Physicians of Edinburgh.

Naval and Military Medical Honours.—Sir De Lacy Evans has a notice of motion on the books of the House of Commons, to ask the First Lord of the Treasury the result of the consideration of Government, promised during last session, respecting the conferring the military class of the Order of the Bath on medical officers who may have been present, and proved deserving, in important naval and military actions.

The Board of Health.—The following is an extract from the Minutes of the proceedings of the General Board of Health. Resolution:—"That it has been established by the Commissioners for inquiring into the means of improving the health of towns, as a general principle of legislation which has been confirmed by subsequent inquiries made under the Metropolitan Sanitary Commission, and adopted by the Legislature as a fundamental provision of the Public Health Act, and which, so far as this Board has proceeded with its own investigations, appears to be equally applicable to the metropolis, that the works for supplying the public with water should be under the same public jurisdiction or management with works of drainage, paving, and surface draining. That, apart from the merits of any particular scheme of new water-works, and pending further investigations as to the practical means of applying the foregoing principle to the metropolis, it is inexpedient to sanction the investment of fresh capital in the same field of supply, as it is probable that the new works will have to be re-purchased, and there can be no security that these will be applicable to the arrangements that may be hereafter recommended."

The Cholera.—Letters from Tunis, of the last month, report the cholera making great ravages in that city,—the deaths averaging from 20 to 25 a day. The charity of the Dey has been most munificent. He has, at his own expense, established three cholera hospitals, and distributed among the people 400 camel loads of corn, 500 skins of fine oil, and 10,000 piastres.

Athens.—The Military Hospital at this place, which cost nearly 300,000 drachmes, has been entirely destroyed by fire. The patients were, happily, saved.

TO CORRESPONDENTS.

"A Correspondent, Teignmouth," writes:—"I have received a circular and prospectus from 'The Industrial and General Life Assurance and Deposit Company,' containing proposals which I am induced to think would be of so favourable operation on the classes for whose benefit they are professedly put forth, that they appear to me to deserve the attention of the masses no less than that of our Profession, to whom you will, on referring to the documents in question, see that these proposals are particularly recommended—our kindly offices are solicited. These most of us are likely enough to bestow if we feel assured that all is as represented. Will you, then, as our Argus, peep into the matter, and, when convenient, say a word or two, in order that no principle, moral or professional, may be endangered by too ready a response to the call of benevolence."

"Cholera Honours."—"Justitia" writes—"It was with sincere pleasure that I observed in your paper of the 2nd, that a testimonial had been presented to R. Whiteman, Esq., for his zealous and efficient services as a medical officer during the late visitation of the cholera; but how seldom are we allowed to be so gratified. Certainly, week after week we have read of public thanks, and even public gifts being awarded to Governors, Lieutenant-Governors, &c. &c., for their great exertion during that fatal disease, which no doubt were due; but amidst all the ruin, the desolation caused by the late epidemic, how has stood the medical man?—scarcely noticed or rewarded. He, the soother of pain and sorrow has had no public honours,—no bright stars of Napoleon glittering in the horizon to urge him on to face death and disease in their most terrific forms; to endure bodily pain and mental anxiety. What has animated, consoled him in his wearied path but the pure love for mankind. His soul is great, and, though faint and worn, he remains unconquered still."

Mr. Harvey's wishes will be attended to.

"M.D., of King's College," writes us in reply to our correspondent "Mors." We regret that the communication reached us too late for the present Number. "M.D., Lond, M.R.C.S." on the same subject, will also find a place in our Journal of next week.

"Dr. Turley" next week.

With every wish to oblige, we fear it will be utterly impossible to comply with Mr. Ogilvie's request, and make room for his communication, unless considerably shortened. We strongly recommend him to lay the matter in question before the Profession in the form of a pamphlet.

A Correspondent informs us, that Dr. Turnbull, not content with sending his *quasi*-cure for chilblains to three English Medical Journals, effected its insertion in the Dublin Medical Press. Also, that Dr. Keal's paper on Hypertrophy of the Thymus Gland, and the letter of Dr. Martin Duncan and Mr. Nunn, on the Substitutes for Cod-liver Oil, appeared in contemporary Journals.

"Mr. McDougall's" communication is in type.

"A Reformer of Abuses" will receive insertion as soon as the state of our columns will permit.

"Dr. J. Stevens, Glasgow."—We shall be happy to receive the cases to which he refers.

"H. L. B., Cambridge."—We are not optical enough to decide. Frauenhofer's discovery, however, is in all the ordinary class-books. Is our Correspondent aware, that some recent discoveries have led to the opinion, that it is the *presence of certain gases* in the atmosphere of the sun which occasions the dark lines; and, after all, he may not even be fighting with a shadow? It has been recently shown, if we remember correctly, that, by passing light through nitrous acid vapour, you may get as many of the so-called black lines as you please.

"Endymion."—State the case again.

"A., Guy's."—We would not operate in such a case.

"M.B., Cork."—You are right, the division is into three classes. Oval, characterizing the civilised nations of the world. Pyramidal, the mark of Nomadic tribes. Prognathous, of course, all the negro families.

"A Beginner, Broadstairs," asks,—1. Is the attendance on Lectures, &c., for M.R.C.S. and L.A.C. cheaper at Edinburgh than in London? 2. Do the Edinburgh diplomas of a general practitioner qualify him for Poor-law appointments in England? 3. Is the Hunterian School of Medicine, Bedford-square, considered a good one, and one where every necessary instruction and advantage is afforded?

1. Yes. 2. A candidate for a Poor-law appointment must possess two qualifications, one medical and one surgical. Any British qualification will suffice. 3. Yes. It is withal the cheapest School in the metropolis.

ORIGINAL LECTURES.

LECTURES
ON
CLINICAL MEDICINE.

DELIVERED AT UNIVERSITY COLLEGE HOSPITAL.

By E. A. PARKES, M.D., Lond.:

Member of the Royal College of Physicians, Professor of Clinical Medicine in University College, and Physician to the Hospital.

LECTURE V.

General Summary of the signs of Valvular Lesions—Case of Aortitis and of Obstructive and Regurgitant Disease of the Pulmonary Valve—Alterations in the Cavities following Valvular Lesions—Case of General Dilatation producing both Anasarca and Hæmoptysis—General Rule as to Affection of Individual Cavities.

GENTLEMEN,—An organic murmur arising in the heart itself, does so, with some exceptions, at the expense of a healthy sound. It abolishes, more or less perfectly, this sound, according as it destroys the genetic elements of the sound with greater or less completeness. It becomes, then, important to determine at what point a murmur supersedes most perfectly the sound or sounds which are normal to that special locality. By this observation another sign of some importance is added to that valuable diagnostic mark, the *direction* of the sound. For example, in extreme aortic insufficiency, a diastolic murmur over the aortic valves, is found to have destroyed the normal second sound over the course of the aorta. On shifting the stethoscope over to the pulmonary artery, the diastolic sound may still be heard, but it now succeeds to, or, as it were, arises out of, a distinct second sound. The inference, consequently, is, that the diastolic murmur is simply a transmitted one, and that the pulmonary valves are competent. It is true that in this case, the other signs of aortic insufficiency are usually so marked, and the lesions of the pulmonary artery are so rare, that this additional diagnostic indication is hardly necessary. It gives me, however, a simple illustration of what I mean, and, indeed, might, if we encountered one of those singular examples of insufficiency of the pulmonary valves, be of diagnostic value. Possibly, in such a case, it might be found that the second sound would be heard over the aorta, and would be abolished over the pulmonary valves and artery, a diastolic murmur existing at both points. Thus we should have the converse of a well-known fact, in the case of aortic insufficiency. I do not assert from personal observation that this would be the case, as I have never seen a case of regurgitation through the pulmonary orifice diagnosed during life; it is merely a suggestion and an illustration. But there are some cases in which it is really of diagnostic importance to determine whether an aortic second sound can be heard. I allude to cases in which, with a double murmur at the base, really due to aneurism, which presents hardly any other signs, or more rarely to roughness and coarctation of the aorta, it becomes a question whether these murmurs may not be simply owing to obstructive and slight regurgitant disease of the aortic valves. Now, in such a case, it appears impossible at first to say that there is no aortic obstruction; but if the aortic second sound is well and plainly heard, and in many of these cases it is even sharply brought out, we might be warranted, provided other signs of aortic insufficiency were wanting, in eliminating regurgitant aortic disease, and, consequently, in referring the diastolic sound heard under the first bone of the sternum to disease of the aorta itself. The systolic murmur would, therefore, be probably referred to the same cause.

In the case of the first sound, which arises apparently from more composite causes than the second, and which is transmitted even more readily than the second, to different parts of the heart, it is not so easy to determine the extent to which it is destroyed; but even here valuable aid is frequently given to diagnosis by noting those parts in which the natural sound is purest. In a case, then, of diseased heart, it is not sufficient to observe and record the morbid sounds alone. The healthy sounds, when they exist, should be always included in the description.

Before commencing the cases which are to occupy us to-day, it may be useful to review our steps, and to give a brief summary of the signs of the valvular lesions we have discussed, and of the rules by which their diagnosis is to be made. We have seen one example of that comparatively infrequent disease, contraction of the tricuspid orifice, and two examples of tricuspid regurgitation. We have seen also an instance of mitral contraction, and several of that common disease, mitral insufficiency. A marked case of aortic obstruction, and as marked a case of aortic insufficiency, have given us the signs peculiar to these affections. Let us, before proceeding further, endeavour to lay down the rules of physical diagnosis which are applicable to these affections.

1. *Mitral insufficiency*, presenting all its characters in perfection, gives us—

1°. A systolic murmur, having its maximum over the left apex, or just outside this, and being followed generally by a second sound.

2°. An accentuation of the pulmonary second sound—the aortic second sound weakened. The accentuation of the pulmonary second sound may not occur if there be coincident *tricuspid* insufficiency. The weakening of the aortic second sound is said to be most marked in old cases in which the size of the aorta is often notably diminished.

3°. The signs of dilated hypertrophy of the left side—sometimes those of the right side.

4°. The signs of pulmonary congestion from reflux.

5°. Thrill at the apex.

6°. A feeble, small, and unequal, but not necessarily an irregular pulse. The smallness of the pulse often contrasts with the vigour of the heart's impulse.

Such a disease, when uncomplicated, is not attended by dropsical symptoms, or by any signs derived from the general venous system.

(a) Of these physical signs, the two last may be eliminated without weakening the certainty of the diagnosis; nor, without at least two others, are they of the least diagnostic value for this special lesion.

(b) If there be no evidence of pulmonary engorgement, that is, cough, hæmoptysis, (not dependent on its other known causes,) expectoration, &c., nor of dilated hypertrophy, the diagnosis of mitral insufficiency still remains sound, if, with a systolic murmur at the left apex, the pulmonary second sound be more accentuated, than can be considered normal, even in those who present naturally a sharp pulmonary second sound.

(c) If the only sign be a systolic murmur at the left apex, this proves, in all probability, disease and alteration of the mitral valve, but perhaps not necessarily regurgitation. This statement is opposed to the usual rule laid down by writers, and especially to the opinions of Hamernjk, and is not to be considered a certain one. In fact, I have not scrupled, and shall ont scruple, to speak of systolic murmur at the left apex as diagnostic of mitral insufficiency. But there are some cases on record, and in this Hospital we have lately seen two, in which thickening and vegetations on a competent valve apparently produced the systolic murmur.

(d) Occasionally, but rarely, mitral regurgitation is unattended by any murmur, and must then be diagnosed by its other signs, if present. If not present, the disease is latent.

2. *Mitral Contraction* is diagnosed with much greater difficulty. The following are the signs sometimes noted:—

1°. A diastolic murmur at the left apex.

2°. Pulmonary congestion and hæmoptysis.

3°. Second sound in pulmonary artery sharpened (unless there is also *tricuspid* insufficiency) in the aorta enfeebled.

4°. Frequently consecutive enlargement of the right heart.

5°. If there be no absolute diastolic murmur at the apex, there may be several sounds, two or three, following the systolic sound. Sometimes these may be reduplications only of the normal second sound, but often they proceed apparently from the mitral valve itself, and are, perhaps, attributable to cleavage of the first sound, or such moiety of the first sound may be heard with a second sound.

6°. There is sometimes purring tremor at the apex. Dr. Hope thought it never occurred, but it has been recorded.

7°. The pulse, as in mitral regurgitant, is weak, unequal, and, from accompanying general dilatation of the heart, may be irregular.

A co-existent systolic murmur is very common, from accompanying mitral insufficiency. Frequently the diastolic sound is wanting; perhaps from the nature of the contraction, perhaps from the feebleness of the current of blood. The pulmonary symptoms which are present, may appear referrible to a co-existent mitral regurgitant disease, and it then becomes almost impossible to diagnose mitral contraction. In such a case, the flow of blood through the aorta, as judged of by the character of the aortic second sound, and the state of the pulse, may be more impeded than can easily be accounted for by the existent mitral regurgitation. Then we may suspect, and carefully examine again for, mitral contraction.

3. *Tricuspid insufficiency* may give the following signs:—1°. A systolic murmur at the right apex; 2°. Pulsation and refilling from below of the external jugulars; 3°. Signs of hypertrophy, and dilatation of the ventricle, and often of the auricle. 4°. Second sound at the right apex often lost; the cause of this deviation from the common rule in mitral insufficiency is obscure. It may depend on a lessened column of blood in the pulmonary artery.

The almost inevitable consequences of any amount of tricuspid regurgitation are impediment to the general circulation and anasarca. The systolic murmur is not always present; nor are the jugular pulsations; but if there is decided evidence of dilated hypertrophy of the right heart, and general anasarca, which cannot be referred to another cause, then the diagnosis may be made of tricuspid disease, either regurgitant, as it almost always is, or obstructive, as it is in some very rare instances. If, in such a case of dropsy, there are no signs even of dilated hypertrophy, then the general venous congestion may be owing to an exceedingly weak and dilated heart. Often the diagnosis of tricuspid insufficiency must be drawn altogether from the general symptoms.

4. *Tricuspid contraction* is so rare a disease, that its signs are not yet known. A diastolic murmur at the right apex from this cause has not, to my knowledge, been recorded. Possibly we might suspect such a lesion, if, to the signs of general dropsy, there were joined evident dilatation of the right auricle without the signs of ventricular hypertrophy, and without the murmur of tricuspid insufficiency.

5. *Obstructive Aortic Disease.*—1.° A murmur at the base, with its maximum over the valves, or just above, and carried along the aorta. If the contracted orifice be very smooth, the murmur may be wanting. 2°. Hypertrophy of the left ventricle, in a degree determined by the extent of the contraction and the general health and occupations of the individual. 3°. Aortic second sound very weak, even wanting, but not superseded by murmur. 4°. Occasional purring tremor. 5°. Pulse unaffected, till contraction be extreme, then small and rather hard, not soft and unequal.

Very nearly the same signs may be given by roughness of the lining membrane of the aorta, by dilatation or aneurism, by pressure from a tumour, or even from a tuberculous lung; only in such cases, if the valves are healthy, three circumstances will often fix the diagnosis; 1°. That the sound is at its maximum above the valves, and is hardly at all heard below them. 2°. That the aortic second sound is of good tone. 3°. That the morbid sound is carried a long way down aorta, and can often be heard better in the back than over the heart. Hamernjk, of Prague, doubts whether a murmur will arise from a roughened aorta, but this cause is usually admitted in this country, and I believe properly so.

Systolic murmurs may arise at the aortic orifice and in the aorta in some cases in which there is no reason to suspect organic change, viz., in anæmia, in typhoid, and probably in typhus fever, in puerperal fever, and it is said in the exanthemata. So also in cases of pressure from below, as in abdominal tumours and pregnancy, or from the side, as in some cases of tumour not directly pressing on the aorta, inorganic

murmurs will occur. It is not always easy to diagnose these from aortic disease, except in the case of anæmia. An inorganic murmur thus arising, is called by Hamernjk "diffuser ton," but the murmur is often as perfect as any arising from obstruction. It is said, that in rheumatism a murmur will occur at the aortic orifice, without endocarditis.

6. *The signs of aortic insufficiency* were given at the last lecture. I need only mention one more of little importance, viz., a lengthening of the interval between the heart's impulse, and the beat at the wrist. Neither of these diseases of the aortic mouth are necessarily attended by obstruction to the general circulation.

7. *Obstruction and regurgitation at the pulmonary* orifice are very rare. The signs of such states will be analogous to similar conditions of the aortic orifice.

Such being the general summary of the physical signs, the following provisos should be borne in mind in examining cardiac affections.

1. These rules presuppose that the heart is in its natural position, has an unchanged axis, and is not to an abnormal extent covered or uncovered by lung; in fact, that there are no circumstances present which may falsify, so to speak, the elements of the problem. If such changes are present, it must be seen what amount of uncertainty they cause in the diagnosis.

2. In the matter of murmurs more especially, it should be always remembered, that to cause vibrations of valves and murmurs, a strong current of blood is necessary. If, therefore, with an extremely feeble heart, there are no murmurs, we cannot say that there is no affection of the valves with the same certainty, as if with a strong powerful heart and a good current of blood, there was an equal absence of murmur. In this last case we might be all but certain there was no valvular disease, but not so in the former case. Therefore, with an extremely feeble heart, the diagnosis must be qualified. You will find it stated by a writer of authority on diseases of the heart, Dr. Blakiston, that mitral regurgitation is "sometimes, but not often," accompanied by systolic murmur at the apex. I must confess, that as far as I have myself been able to examine cases, and to consider those recorded by others, I should doubt whether this statement is not too broadly put. It appears to me, that except in cases of manifestly weak hearts, or failure of circulation from arrest of the current of blood, if the other signs of mitral regurgitation exist, the systolic murmur at the apex is never or very seldom wanting. Among the great number of instances of systolic murmur at the apex which daily present themselves, the difficulty, it appears to me, is to decide whether the murmur is to be referred to regurgitation, or to other conditions of the mitral valve, not involving insufficiency. But there is seldom any difficulty in finding the murmur in decided insufficiency.

3. When two or more cardiac diseases are combined, the signs may be slightly modified; thus, extreme mitral regurgitation, with a rather weak heart, may prevent an aortic obstructive or regurgitant murmur, by greatly diminishing the flow of blood through the orifice. Such a condition, however, does in reality fall under the rule given above. Again, tricuspid insufficiency may prevent any increased sharpness of the pulmonary second sound in mitral insufficiency.

Let me now call your attention to a case which, although unfortunately very poor in detail, is yet interesting as being an example of two most uncommon affections, viz., aortitis and obstructive and regurgitant disease of the pulmonary artery. This will almost complete the series of valvular lesions.

Some few months ago, a woman, aged about 30, was admitted into the Hospital. She was unable to give any account of herself, and she had no friends to give us any information. She was, in fact, apparently dying; was apathetic, torpid, and indifferent. With some difficulty we learned that she was unmarried, a servant of all work, had lived in a damp kitchen, had been badly fed and overworked, and some indefinite time before, had had rheumatism. All we could learn about her present attack was, that she had been ill only two or three days, that she had shivered, and had, at the time of the inquiry, severe pain in the head. The skin was cool; there were no spots. The patient lay on either side indifferently; breathed rather hurriedly, yet not very much so, and had a dull, heavy, inattentive, but not suffering, cast of countenance. The pulse at the wrist was small and irregular. As the nurse said she had been heard to cough a good deal, we lifted her up at once for the purpose of examining the bases of the lungs. There were signs of general bronchitis, but none of pneumonia. From the third dorsal vertebra quite down to the lumbar region, there was an extremely loud rough systolic murmur. This was much louder than cardiac murmurs ever are in this situation. On examining the heart, we found a moderate impulse, and a normal position; the amount of dulness was not marked out. All over the cardiac region, base, and apex, was a loud rasping systolic murmur. This was decidedly much louder over the aortic valves, and up the aorta, than at the apex; but it was heard at this point also. There was no jugular pulsation. There was no diastolic murmur; but I have no notes of the changes in the second sound. At the base of the heart was extreme purring thrill. There was no œdema of the feet nor other marked symptoms of any kind.

It was clear that in this case there was something wrong about the aortic valves, and probably the aorta itself; but whether this was old or recent, or what the nature of the present attack might be, was not very clear. At the next examination we should no doubt have made out more about the case; but the patient died before we had an opportunity of examining her again.

After death we found the lungs congested, but without lobular, or other kind of, pneumonia. The pulmonary artery of the left lung presented large deposits of firm grey atheroma; these disappeared as the smaller branches were approached. The pulmonary artery in the right lung showed a few points only of atheroma. Between the patches the natural glistening of the lining membrane was well preserved. There were no tubercles. The pericardium had evidently, at some former period, been inflamed. There were a few small patches of old lymph in the right ventricle; on the right auricle were numerous points of old lymph, and towards the appendix regular layers of lymph, which could be peeled of. The heart weighed 16 oz.; it was not rounded; the apex was formed entirely by the left ventricle. The right auricle and ventricle were both dilated and hypertrophied; curiously enough, the hypertrophy in the ventricle seemed to have occurred chiefly at the apex; thus the walls were only two lines thick at the base, three in the centre, and five at the apex. The tricuspid appeared healthy and competent. On passing the finger into the pulmonary artery, it was found that it scarcely admitted the little finger; on looking at it from above, the flaps were seen to be very much thickened, adherent to each other, and to form, by their union, an irregular triangular opening, at one point of which was a little nodule of lymph. The valve was decidedly incompetent as well as obstructive. Above the valve the artery was of its normal size; there were patches both of old lymph and of atheroma on and between its coats. The atheroma was not so abundant as in the left pulmonary artery; there was no redness. The left auricle and the left auriculo-ventricular opening and valve were healthy and competent. The left ventricle was slightly dilated; its walls were only three lines thick at the base and two at the apex; the muscular substance was flabby, and did not present the firm, dense feel of the right ventricle. The aortic valves allowed water very slowly to regurgitate through them; the orifice admitted the middle finger with some difficulty; stretched out, it measured only 2½ inches; the valves were thickened, rather rigid, and of a most vivid red colour. From this point to its bifurcation into the iliacs the aorta was evidently violently inflamed; there was intense patchy redness, of a brighter colour than that of imbibition, and there were throughout also thickenings of the inner coat and parts below, and bulgings on the inner surface of the vessel from large patches of atheroma which were, probably, old, and from extensive deposits of evidently recent lymph thrown out upon the lining membrane, and in some parts below it. The atheromatous deposit was most marked in the thoracic aorta. The recent exudation-matter was most abundant in the arch of the aorta, where it was so copious as to give the lining membrane almost a scabrous appearance, which was partly effaced by stretching. The normal smoothness and polished appearance of the membrane was lost throughout. The calibre of the aorta was, throughout, diminished in some places more than others. Owing to a mistake the large arteries of the neck were not examined.

In the abdomen the spleen was the organ most diseased. It was greatly enlarged, (weighing 30oz. 2dr.,) hard and rounded; the tissue was without fibrinous deposits, was dark and unusually firm under the knife. The liver was large, (65oz.,) soft and flabby; there was no atheroma in the vena portæ. Both kidneys were large, (viz., right, 6½oz., —left, 7oz. 2dr.,) flabby, with capsules readily separable from pale, smooth surfaces. On section, the cortical substance was very white, flabby, broadened, without injection anywhere; there was a small cyst on each kidney. Stomach, intestines, and brain presented nothing abnormal.

This case is almost valueless to us, as far as physical signs go, as we had not time to consider it with sufficient minuteness. We had recognised easily, on account of the murmur, some affection implicating a great extent of the aorta; but we had not determined the old or recent origin of this. But, as regards aortitis, we had here no violent pulsations of the aorta, no angina, no heat of surface, and no great distress; but these symptoms might have been absent from the near approach of death. We had no œdema,—a symptom which Bizot noticed in his three cases of aortitis. If we had seen more of the patient, should we have diagnosed the aortitis? This I cannot undertake to say. I think, possibly, not. I think, unless we had had other symptoms, we should have diagnosed old roughening of the aortic lining membrane. The signs of the pulmonary-valve lesion also were concealed by the loud aortic bruit,—and in the single examination we made we had hardly any chance of distinguishing the two lesions. The systolic murmur at the apex was, probably, transmitted from the aorta. The case may be valuable, in spite of its meagreness, as putting you in mind that these rare affections, aortitis, and disease of the pulmonary valves, may yet come before us in our clinical examinations, and are, therefore, to be included in that list of diseases which we have to consider when we finally fix the diagnosis. If we omit them, on account of their rarity, we may, probably, some day or other, pay the penalty by an error in diagnosis.

(To be continued.)

LECTURES
ON
THE CHEMISTRY OF THE POISONS;
OR, ON
PRACTICAL TOXICOLOGY.

SHOWING THE APPLICATIONS OF CHEMISTRY TO THE DISCOVERY OF CRIME.

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LECTURE XIV.

Impurities in Nitric Acid, their sources and modes of detection. (a) Oxides of Nitrogen; (b) Muriatic Acid; (c) Iodine and Iodic Acid; (d) Sulphuric Acid; (e) Iron; (f) Potash, Soda, and other fixed substances; (g) Arsenic. The Methods of Purifying the Acid, and of obtaining a pure Monohydrate. Hydrochloric Acid; its synonyms, Properties of the Gaseous Acid. Its action on Plants and Animals. The Physical Properties of the Gas. Its Chemical characters. Affinity for Water. Action on litmus paper, ammonia, metals, and metallic oxides. Liquid Muriatic Acid, Compositions of the several varieties of, as Davy's, Graham's, Dalton's. Physical Properties of the Liquid Acid. Ure's Table of Density and Percentage Composition. Dalton's Table of Boiling-points.

To-day, gentlemen, I shall direct your attention to the impurities which have been discovered in nitric acid, and to the methods which are to be adopted for the rectification of this liquid.

IMPURITIES IN COMMERCIAL AQUA FORTIS.

(a) *Lower Compounds of Nitrogen and Oxygen*, such as nitrous acid, hyponitrous acid, &c. These impurities, so commonly present in nitric acid, are produced, in many instances, by the spontaneous decomposition of the fluid. In point of fact, it is hardly possible to keep a sample of strong nitric acid,

even for a few days, without its being acted on by solar light and resolved into oxygen, and one or other of the impurities in question. An elevation of temperature will still further promote the decomposition.

Both of these impurities are easily recognised, when they exist in any quantity in the acid, by the colour which they communicate to it; for nitrous acid, or, as it is sometimes named, hyponitric acid, gives a yellow, an orange, or a red tint to the liquid; and hyponitrous acid imparts to it a green or a blue colour, the intensity of the shades being, in each case, in direct proportion to the quantity of impurity present.

The experiments made by Sir Humphrey Davy led him to conclude, that the colouration of aqua fortis was due to the presence of binoxide of nitrogen; for he found that the addition of 1·2 per cent. of this oxide to colourless nitric acid gave it a pale yellow tint; that 2·96 per cent. of the gas communicated a bright yellow colour; 5·56 per cent., a dark orange; 6·45, a light olive; 7·0, a dark olive; 7·76, a bright green; and 8 per cent., of the binoxide, imparted a deep blue colour to the liquid. But, as Dr. Ure very truly states, these shades of colour cannot be dependent on the amount of binoxide present, for frequently the addition of a little water to a pale yellow strong acid will instantly make it of a deep orange colour; while the dilution of an orange-coloured acid will often produce a green tint. And, to judge from the results obtained by other chemists, it would appear that binoxide of nitrogen cannot exist, or rather, that it cannot preserve its integrity, in a strong solution of aqua fortis; for, from the circumstance of this oxide having a great affinity for oxygen, it will instantly re-act on the liquid, and form a greater or less quantity of the two other compounds to which I have been referring, the intensity of the change being, in great part, dependent on the strength of the fluid acted on. In proof of this, I might quote the experiments made long since by Mr. Phillips, more recently by M. Thenard, and lately by Millon; from which it is evident, that, while a weak acid, as, for example, that having a density of 1050 is not discoloured by a stream of nitric oxide, the stronger acids are; for an acid, whose specific gravity is 1150, is made blue when it is saturated with the gas; an acid of 1350 is rendered green by it; that of 1400 is converted into a yellow liquid; and an acid, having the density of 1500, is coloured of a deep red tint. So, again, it is found, that the addition of nitrous acid to colourless aqua fortis will instantly communicate a deep orange colour. And from the circumstance, that both the olive green and the blue solutions evolve nitrous acid, and binoxide of nitrogen, when they are heated or diluted, there is every reason for believing that the higher kinds of colouration are due to the presence of hyponitrous acid, and the red tints to the presence of nitrous.

The chemical tests by which you may recognise the existence of these impurities are based upon some experiments recently made by Millon; who states, that pure diluted nitric acid is entirely without action on the iodides, the monosulphurets, the protosalts of iron, prussiate of potash, indigo, and bile; but that, if it contain a trace of a lower oxide of nitrogen, it will then liberate iodine from the first and sulphur from the second of these compounds; it will also discolour the third, give a green tint to the fourth, bleach the fifth, and occasion a remarkable play of colours with the sixth named body. It is difficult, however, to obtain an acid so pure as to be free from all these re-actions; and you may rest satisfied that the amount of nitrogenous impurity is not very great, when the liquid fails to produce a turbidity in a strong solution of sulphuretted hydrogen. In performing this experiment you are to dilute the nitric acid with three times its bulk of water, and then to add the test liquor. Unless you proceed in this way you are very likely to get fallacious results, inasmuch as the strong acid will, let it be ever so pure, instantly re-act on the sulphuretted liquor, and, by forming water and hyponitrous acid, lead to the precipitation of sulphur. According to Leconte, an acid of sp. gr. 1330 will readily occasion this change.

Muriatic Acid, or, more properly speaking, *chlorine*, is very frequently met with in commercial nitric acid. It owes its origin to the alkaline chlorides contained in the rough saltpetre from which the acid is prepared. This impurity is easily recognised by its giving a white precipitate with a soluble salt of silver.

(c) *Iodine, or Iodic Acid*, have also been detected in this liquid. M. Lembert states, that he is able to detect iodine in most samples of commercial aqua fortis, and his statement has been confirmed by Hayes, Gmelin, and other chemists. This fact is accounted for by the circumstance, that the Chili nitrate of soda, so often employed in the manufacture of nitric acid, contains a greater or less proportion of alkaline iodides; these salts undergo decomposition during the process of distillation, and yield their haloid element to the acid contained in the receiver. The impurity may be detected, either by distilling the acid with strong oil of vitriol and watching for the violet vapours of iodine which appear after the nitric acid has passed over, or by neutralizing the acid with carbonate of soda, mixing it with a little starch, and then cautiously adding, drop by drop, a small quantity of strong sulphuric acid; by which means you will obtain the characteristic blue colour of iodide of starch. Chlorine added to the liquid does not produce this effect; showing that the iodine exists in the acid in the form of an oxide.

(d) *Sulphuric Acid* is another common impurity in aqua fortis; and, like the preceding, it is derived from the materials employed in the preparation of the liquid. It is to be recognised by diluting the acid with three or four times its bulk of water, and then testing it with a solution of nitrate or muriate of baryta, either of which salts will occasion a white precipitate if sulphuric acid is present.

(e) *Iron* is very frequently contained in nitric acid, and the impurity may be detected by supersaturating the liquid with liquor ammoniæ; by which means you obtain a brown or yellowish brown deposit of peroxide of iron. Some chemists recommend the employment of sulphocyanide of potassium as a means of discovering the presence of this impurity, inasmuch as it strikes a deep blood-red colour with the merest trace of a persalt of iron; but, as Tromsdorff has pointed out, there is some difficulty in applying the test to strong solutions of nitric acid. I have, therefore, made choice of the volatile alkali.

(f) *Potash and Soda Salts, Alumina, and other fixed substances*, may also be contained in commercial aqua fortis; but they are easily recognised by the saline deposit which is left after the volatilization of the acid.

(g) Lastly, I ought to state, that some chemists have lately spoken of the existence of *arsenic* in nitric acid, derived from the impure sulphuric acid from which it has been distilled; but I have never succeeded in detecting the existence of this impurity, otwithstanding that I have purposely distilled the acid from many grains of white arsenic.

THE PURIFICATION OF NITRIC ACID.

In your search for chlorides and sulphates in organic matters, it is necessary that you should employ very pure nitric acid. So also, in conducting many processes of the arts, it is equally necessary that the aqua fortis made use of should be perfectly free from chlorine: hence it is, that many chemists, as, for instance, Mohr, Wackenroder, Wittstein, and Millon, have devoted much attention to the means whereby this acid may be easily and effectually purified. All these chemists have shown, that, when crude nitric acid is diluted and distilled, the various impurities pass over at different stages of the process: thus, chlorine, water, and hyponitrous acid are the earliest products of the distillation; then follow nitric and nitrous acids, and, in the end, oil of vitriol and iodine make their appearance in the receiver. Taking advantage of these circumstances, we may effect a moderately good rectification of crude aqua fortis, by simply distilling the liquid, and changing the receiver at proper intervals. But you will notice, that, in the process here indicated, the nitric acid comes over mixed with the red fumes of nitrous acid. To obviate this difficulty, Millon has suggested the use of bichromate of potash, the acid of which yields its oxygen to the lower oxides of nitrogen, and so produces a pure and colourless product.

The process which I shall now describe to you is founded on the results of these several observations. Dilute the acid with about its own bulk of water, so as to reduce it to the density of 1200. Make the mixture hot, and dissolve therein a portion of bichromate of potash, using about one grain of the salt to every 100 of the strong acid. Then add a solution of nitrate of silver as long as the liquid produces a curdy precipitate. Set the mixture aside for twenty-four hours, and carefully pour off the clear supernatant liquor. Introduce it into a retort, and distil it at a very gentle heat until it is almost dry, taking care to reject the first half of the distilled liquid. By operating in this manner, you will obtain a limpid, colourless fluid, having a density of about 1400, and being perfectly free from every kind of impurity.

Millon has shown, that you cannot rectify an acid in this way whose density is above 1480; hence the necessity of diluting the aqua fortis before it is introduced into the retort.

Should you have occasion to employ a very strong solution of nitric acid, it may be obtained by distilling the product of the preceding operation from its own bulk of strong sulphuric acid. The two acids should be mixed before they are introduced into the retort, and they should be distilled at as low a temperature as possible, using a hood over the body of the retort, so as to prevent the acid vapours from condensing on the sides of the vessel, and returning into the boiling liquid. The acid thus obtained has a density somewhere about 1500; and it may be still further concentrated, by re-distilling it from a second portion of strong oil of vitriol. If the process is carefully conducted, the fuming red product is always free from sulphuric acid; in point of fact, the only impurity contained in it is a lower oxide of nitrogen, which gives it its orange-red tint. This impurity may be separated, and the acid decolourised, by introducing it into a flask or bottle, heating it to the temperature of 170° of Fahr., and then treating it for two or three hours with a stream of dry atmospheric air, or dry carbonic acid. By operating in this manner, Millon obtained a pure limpid, colourless acid, whose density was as high as 1521 at 50° Fahr.; and Smith also procured a liquid, as limpid and colourless as water, though it had a specific gravity of 1517, at 60° Fahr. In both these cases the fluid obtained was a pure monohydrate of nitric acid.

I now leave this subject, and proceed to the consideration of another mineral compound, namely,

HYDROCHLORIC ACID:

which has also been named *Clorhydric Acid, Muriatic Acid, Spirits of Salt*, and *Marine Acid*.

The recorded instances of poisoning by *liquid* muriatic acid are very few. This fact will strike you as being rather remarkable, when you consider how easily the poison is obtained, and how commonly it is in the hands of careless and ignorant persons. It happens, however, that chemists and medical jurists are occasionally consulted respecting the ordinary effects of *gaseous* hydrochloric acid on living and brute matter. To give you a case, by way of example. In the manufacture of carbonate of soda from common salt by the English process, large quantities of gaseous muriatic acid are permitted to escape into the atmosphere, and so to destroy the surrounding vegetation, and otherwise to damage the health and property of those who reside in the immediate neighbourhood. From time to time, various law-suits have been instituted, upon the ground that this acid is a noxious poisonous compound, and compensation, to a very considerable amount, has been claimed for the annoyance suffered and the damage done. It is, therefore, very desirable, that you should be made acquainted with the leading properties of this gas.

1st. *As regards its Physiological Effects.*—Gaseous muriatic acid is a powerful irritant, for it occasions spasm of the glottis and a sense of suffocation if you attempt to inhale it in a moderately pure state. Even when the gas is largely diluted with atmospheric air it produces great annoyance to those who respire it, causing a violent fit of coughing and a stinging pain in the bronchial membrane directly it enters the lungs. Here is a mixture, consisting of one part by volume of hydrochloric acid gas, and 1000 of air. If you breathe from this mixture you

will find that it causes much discomfort to you, and occasions a feeling of constriction in the throat and chest. In point of fact, the irritating power of the gas is so great, that it manifests itself by its odour when it is diluted with 10,000 parts of atmospheric air. So, again, you will find that the gas acts strongly on the conjunctival membrane, occasioning pain in the eyes and a copious flow of tears. It also irritates the skin and produces discomfort on every part of the body submitted to its action. In the Elements of Materia Medica, published by my respected predecessor, Dr. Pereira, it is stated, that "this gas acts injuriously on animals, even when mixed with 1500 times its volume of atmospheric air." Mice or birds introduced into the pure gas, struggle, gasp, and die within two or three minutes. Diluted with atmospheric air, the effects are of course milder, and in a ratio to the quantity of air present. In horses it excites cough and difficulty of breathing. When animals are confined in the dilute gas, in addition to the laborious and quickened respiration, convulsions occur before death. Messrs. Rogerson state, that "in a legal suit for a general nuisance, tried at the Kirkdale Sessions House, Liverpool, it was proved that horses, cattle, and men, in passing the alkali works, were made, by inhaling this gas, to cough, and to have their breathing much affected. In the case of Whitehouse *v.* Stevenson, for a special nuisance, tried (some time since) at the Staffordshire Assizes, it was proved that the muriatic acid gas from a soap manufactory destroyed vegetation, and that passengers were seized with violent sneezing, coughing, and occasional vomiting. One witness stated, that when he was driving a plough, and saw the fog coming, he was obliged to let the horses loose, when they would gallop away till they got clear of it."

With respect to the action of this gas on living vegetables, Drs. Christison and Turner have shown, that it is destructive to plants when it exists in the atmosphere mixed with 20,000 parts of air. In this stage of dilution, although it is quite undetectable by the nose, it shrivels the leaves and kills the plants which are exposed to its action for twenty-four hours. The Messrs. Rogerson, however, state that it does not exert any injurious action on vegetables, when it is diluted with 1500 times its volume of atmospheric air, but, as Dr. Christison has shown, this statement is incorrect, the conclusion having been derived from a few experiments, performed on a very limited scale.

2. *The Physical Properties of Hydrochloric Acid Gas.*—When this gas is examined in a dry bottle it is colourless and invisible. It is heavier than atmospheric air in the proportion of 1270 to 1000; consequently, when it is liberated in the air, it has a tendency to fall down as a cloud upon the surface of the ground. Taking advantage of its great specific gravity, this gas may be collected in dry bottles by displacement.

3. *The Chemical Properties of the Gas.*—It has a great affinity for water, so much so that it abstracts aqueous vapour from the atmosphere, and forms dense white fumes. If a bottle full of the pure gas is opened under water, the acid is so rapidly absorbed that the liquid rushes into the vessel with great violence. Again, its affinity for water is made evident by dropping a small piece of ice into an atmosphere of the pure gas, when the absorption is so energetic that the ice is instantly liquefied. At ordinary temperature, and atmospheric pressure, water dissolves between 450 and 500 times its volume of the gas, producing a liquid which increases considerably both in bulk and temperature.

Pure muriatic acid gas is not a combustible body, nor is it a supporter of combustion; for the light of a taper is extinguished directly it is plunged into the gas. This faculty is preserved by the gas even when it is largely diluted with air. You see here that a taper will not burn in a mixture consisting of 1 part of gas to 4 of air; and that it burns very dimly, with a smoky blue flame, in air containing only 20 per cent. of the gas. In point of fact, the influence of the gas upon combustion is made evident by the smokiness of the flame, when the atmosphere contains no more than 2·5 per cent. of hydrochloric acid.

The acid reddens litmus paper, even when it is diluted with 10,000 times its volume of air.

Like all the volatile acids it fumes with ammonia. This effect is very perceptible in an atmosphere which contains only 0·01 per cent. of the acid. It acts likewise on a solution of nitrate of silver, causing a white or opalescent appearance with a drop of this liquid when the gas is diluted with 200,000 parts of air. The gas slowly attacks many of the commoner metals, as, for example, zinc, iron, and tin. It also effects the decomposition of many metallic oxides, forming therewith water and a complimentary chloride. With certain of these oxides, as, for instance, with the peroxides of lead and manganese, it not only forms the compounds just mentioned, but it also liberates chlorine.

Lastly, I have to inform you, that the composition of this acid is, by volume, 1 part of chlorine and 1 of hydrogen, making 2 parts of muriatic acid gas. By weight it consists of 36 parts of chlorine and 1 of hydrogen. Its equivalent, therefore, is 37, and its symbol is HCl.

LIQUID MURIATIC ACID.

All the varieties of spirits of salts which are met with in commerce are solutions of hydrochloric acid gas in water. And, notwithstanding that the strengths of these solutions vary, and that Dr. Thompson has drawn up a Table exhibiting 15 definite compounds of hydrochloric acid and water, beginning with a compound of 1 of acid to 6 of water, and terminating, in arithmetical order, with a compound consisting of 1 of acid to 20 of this liquid; yet I do not know whether I am quite justified in saying, that any of these are fixed and well-defined chemical hydrates. The following, however, are among those which have the greatest claim to such consideration.

1st. *The strongest Liquid Acid.*—This might be named Sir Humphrey Davy's acid, for he first showed, that water will, at ordinary temperature and pressure, dissolve about 480 times its volume of this gas, by which means it produces a liquid which has a density of 1210, and contains about 40·65 per cent. of the pure gas. This indicates, that the strongest liquid acid consists of 1 equivalent of gas equal to 37, and 6 equivalents of water equal to 50. Its formula, therefore, is $HCl. + 6 HO$, and its equivalent is 91.

2. *Graham's Acid.*—Professor Graham states, that when the preceding is heated in the open air, a large portion of the gas escapes, and a liquid is left behind, which always contains about 25·52 per cent. of acid. This liquid appears, therefore, to have some claim to the title of a definite compound. It is composed, according to Mr. Graham, of 1 equivalent of acid, equal to 37; and 12 of water, equal to 108. Its formula is $HCl. + 12HO$, and its equivalent, 145.

3. *Dalton's Acid.*—Dr. Dalton, Dr. Clark, and others, have remarked, that strong solutions of muriatic acid become weaker by boiling, and that weak solutions become stronger; so that, in each case, a liquid is obtained which contains the same proportion, namely about 20 per cent. of free hydrochloric acid. This liquid has a density of 1094; it boils at a constant temperature, (232° Fahr.,) and distils unchanged. Its vapour consists, according to Bineau, of 1 volume of gas and 8 volumes of aqueous vapour. It appears, therefore, to be a definite compound of 1 equivalent of hydrocloric acid, and 16 equivalents of water; consequently, its atomic weight is 181, and its formula $HCl + 16 HO$.

The other solutions of hydrocloric acid appear to be mechanical mixtures of one or other of the preceding with water.

PHYSICAL PROPERTIES OF THE LIQUID ACID.

Pure muriatic acid is colourless and limpid, like water. It is difficult, however, to procure such an acid. That which is usually met with in commerce has a yellow or orange tint, in consequence of the many impurities contained in it. The liquid acid has the odour, the taste, and the general physiological properties of the gaseous compound. Its specific gravity is always greater than that of water; and you will notice, that its density is in direct ratio with the quantity of acid contained in it. Kerwan, Dalton, Davy, Thompson, and Ure have each examined this subject, and have drawn up tables, showing the relation which exists between the per centage strength of the acid, and its density. Of these tables, Dr. Ure's occupies an intermediate place; And, as far as my experiments have gone, his numbers appear to represent the truth. Allow me, therefore, to place before you the following, which I have taken from his Dictionary of the Arts and Manufactures:—

TABLE OF MURIATIC ACID, BY DR. URE.

Sp. gr.	Real Acid in 100 Parts.	Sp. gr.	Real Acid in 100 Parts.	Sp. gr.	Real Acid in 100 Parts.	Sp. gr.	Real Acid in 100 Parts.
1200.0	40·78	1151·5	30·58	1100·0	20·39	1049·7	10·19
1198·2	40·37	1149·4	30·17	1098·0	19·98	1047·7	9·79
1196·4	39·96	1147·3	29·77	1096·0	19·57	1045·7	9·38
1194·6	39·55	1145·2	29·36	1093·9	19·17	1043·7	8·97
1192·8	39·15	1143·1	28 95	1091·9	18·76	1041·7	8·56
1191·0	38·74	1141·0	28·54	1089·9	18·35	1039·7	8·16
1189·3	38·33	1138·9	28·14	1087·9	17·94	1037·7	7·75
1187·5	37·92	1136·9	27·73	1085·9	17·53	1035·7	7·34
1185·7	37·52	1134·9	27·32	1083·8	17·13	1033·7	6·93
1184·6	37·11	1132·8	26·91	1081·8	16·72	1031·8	6·52
1182·2	36·70	1130·8	26·51	1079·8	16·31	1029·8	6·12
1180·2	36·29	1128·7	26·10	1077·8	15·90	1027·9	5·71
1178·2	35·88	1126·7	25·69	1075·8	15·49	1025·9	5·30
1176·2	35·48	1124·7	25·28	1073·8	15·09	1023·9	4·89
1174·1	35·07	1122·6	24·87	1071·8	14·68	1022·0	4·49
1172·1	34·66	1120·6	24·47	1069·7	14·27	1020·0	4·08
1170·1	34·25	1118·5	24·06	1067·7	13·86	1018·0	3·67
1168·1	33·85	1116·4	23·05	1065·7	13·46	1016·0	3·26
1166·1	33·44	1114·3	23·24	1063·7	13·05	1014·0	2·85
1164·1	33·03	1112·3	22·83	1061·7	12·64	1012·0	2·45
1162·0	32·62	1110·2	22·43	1059·7	12·23	1010·0	2·04
1159·9	32·21	1108·2	22·02	1057·7	11·83	1008·0	1·63
1157·8	31·80	1106·1	21·61	1055·7	11·42	1006·0	1·22
1155·7	31·40	1104·1	21·20	1053·7	11·01	1004·0	0·82
1153·6	30·99	1102·0	20·80	1051·7	10·60	1002·0	0·41

On making a careful examination of this Table, you will hardly fail to notice, that there is a pretty constant numerical relation between the specific gravity of the liquid and its per centage strength. This relation is made evident, by multiplying the excess of the density over 1000 by 0·2; by which means you invariably obtain a number that very nearly represents the per centage amount of real acid in the liquid. To take one case by way of example: An acid of specific gravity 1162 has an excess of 162 over the 1000. This excess, multiplied by 0·2, gives a product ($162 + 0·2 = 32·4$) which may be said to indicate the true per centage strength of the acid; for 32·4, the calculated number, is not very far from 32·61, the experimental one, as shown on the Table.

In the London and Dublin Pharmacopœias, 1160 is mentioned as the density of the strong acid. The Edinburgh College, however, have fixed upon 1170 as its standard of specific gravity. But, you will fall into error, if you conclude that the druggist is ever accustomed to furnish an acid of these exact densities. On the contrary, nothing can be more variable than the strengths of the commercial acid; for the specific gravity of it may range between 1190 and 1100. Davy's acid has a specific gravity of 1200, or, as some say, 1210, Graham's of 1126, and Dalton's of 1094.

The temperature at which the liquid acid boils varies with its strength. This fact was first demonstrated by Dr. Dalton, who showed that both weaker and strong acids boiled at lower temperatures than that of specific gravity 1094. The differences being represented in the following Table:—

DALTON'S TABLE OF THE BOILING POINTS OF LIQUID MURIATIC ACID.

Sp. gr.	Boiling Point.	Sp. gr.	Boiling Point.	Sp. gr.	Boiling Point.
	° F.		° F.		° F.
1166	170	1121	228	1047	222
1154	190	1094	232	1035	219
1144	212	1075	228	1018	216
1136	217	1064	225	1009	214
1127	222				

Lastly, it is commonly stated, that the strongest liquid acid boils at about 112°; and that it freezes at 60° Fahr., that is, at 92 degrees below the congealing point of water.

In my next lecture I shall commence the chemistry of this acid.

ORIGINAL CONTRIBUTIONS.

ON THE TREATMENT OF PERFORATION OF THE MEMBRANA TYMPANI BY OPERATION.

By WM. HARVEY, Esq., M.R.C.S.L.

In the spring of 1848 I was consulted by a young woman, a patient at the Dispensary, who informed me she had been deaf for upwards of twenty years. She was thirty-five years of age, and had been under the care of several Medical men, who had tried every known remedy to relieve her, but unsuccessfully. Her deafness dated from childhood, when she suffered from an attack of scarlet-fever. This was followed by severe and continuous otorrhœa;—a symptom that persisted when she presented herself at the Dispensary. A rush of air through the middle ears, which passed out through the external meatus when she blew her nose, showed that the membranæ tympani were perforated, and this, on examination, proved to be the fact. There was a small opening at the bottom of each membrane, and the discharge was free and muco-purulent. The lining membrane of the meatus was in a state of chronic inflammation, and somewhat thickened. Deafness was not complete, as she could hear a watch tick when applied close to the ear, but was well enough marked to render it impossible for her to gain her living by the employment she had been brought up to—that of a governess. All these things being considered, the length of time the infirmity had lasted, the failure of the ordinary remedies to arrest the otorrhœa, or improve the hearing, and the position in which my unfortunate patient was placed, by her utter inability to follow her employment, rendered it imperatively necessary to seek some means by which we might be enabled to restore to her some degree of hearing, if possible. In such a case, the old adage, "*Anceps remedium melius est quam nullum*, would be admitted to have full sway. It was evident that the diseased condition of the meatus and tympanum were the sole causes of the deafness; the middle and internal ears were sound, and the Eustachian tube pervious; it was equally evident, in my opinion, that the low inflammation and ulceration of the membrane were partly the cause, and sufficed to keep up the general mischief and impairment of hearing that was going on. Under these circumstances, in consultation with a medical friend, well conversant with diseases of the ear, who happened to be at the Dispensary at the time, and bearing in mind the fact, that hearing, to a considerable extent, has returned, when the membrane has entirely disappeared, I determined to slit up the membrane in the ear that was more diseased than the other, and try the effect of that experiment to improve her condition. It was clear that she could not be rendered worse; it was not improbable that her situation might be improved. Accordingly, I passed an iris knife through the ulceration in the membrana tympani of the right ear, and divided it close to its insertion in the bony ridge, extending afterwards the incision in another direction, so as to leave two or three flaps of membrane floating loosely over the cavity of the tympanum, taking care, when using the knife, not to injure any of the delicate contents of the middle ear. The bleeding was very trifling. Considerable inflammation, complicated even, unfortunately, for a few days by erysipelas, followed this operation. The discharge afterwards diminished daily, and the hearing gradually improved on that side; from not being able to hear a watch tick at a few inches distance from the head, she could distinguish its sound at as many feet, and could also take her part in ordinary conversation nearly as well as if she had never been deaf. The meatus was examined from time to time, with the aid of the speculum, and the membrane was observed gradually to disappear, till at last scarcely any of it remained. It was, of course, necessary, after the operation, to guard against too powerful an impression being made upon the auditory nerves, until they had become accustomed to the unwonted stimulus.

Gratified with the success that followed the first operation, and desirous to experience an equal amount of benefit in the condition of the left ear, which was in nearly as diseased a state as the other, my patient earnestly desired to undergo the operation on that side also. This was done, and with decided benefit, although not equal to that which followed in the right ear. She is now free from discharge or any signs of inflammation in either ear; can hear very fairly with both, can enjoy the pleasures of conversation with her friends, and can pursue her ordinary avocations as a governess with gratification and profit to herself. It is now nearly two years since these operations were performed, and I have great pleasure in stating, that when I saw her last, about ten days or a fortnight since, her hearing remained as good, and her ears as free from disease as when she ceased her attendance at the Dispensary.

The results of this case, the operation being almost, if not quite an experiment, were very satisfactory. The diagnosis I had formed, as to the condition of the middle and inner ears, was confirmed, for the recovery of hearing to so great an extent showed that the nerves had not become paralysed by their imperfect action for so long a period of time. It would, perhaps, be difficult to explain the manner in which the destruction of the membrana tympani acted in restoring audition; it is far more easy to understand the manner in which it is impaired when the membrane is perforated. Sound is no longer transmitted by a drum, when the parchment covering it has been burst, neither can the membrane transmit it through the chain of the ossicula auditûs, when its continuity has been destroyed, by however small an opening. How, then, does sound pass when the membrane is entirely lost? There have been many instances on record, in which such a condition of the ear has been co-existent with tolerable, although not perhaps perfect audition. Can it be that, under such circumstances, the cavity of the tympanum itself acts merely as a prolongation of the external meatus, and conducts sound to the fenestræ rotunda and ovalis, whence its impression is conveyed through the internal ear to the brain? If such be the case,—and it is the only feasible explanation that presents itself at present,—it will be readily admitted, that a certain and important part of the organ of hearing being rendered imperfect, it cannot be expected that the fulness of the function would be restored. A certain degree of imperfection in the hearing might, and must be expected; but still, a great step is gained, if by this operation we are enabled to assist our deaf patients to hear a watch tick at the distance of several feet, to join in the pleasures of conversation, and to perform the ordinary avocations of life. I believe such an operation has never yet been performed by any other surgeon; the case, in my opinion, as far as regards the destruction of the membrane of the tympanum by a surgical operation, is unique. The only one at all bearing on it, is one related by Saunders, in his Folio work on Diseases of the Ear, p. 27. He is speaking of the formation of a false membrane in the meatus, consequent on disease of the membrana tympani, and of the operation necessary for its cure. The case he narrates, although not precisely similar to mine, yet bears it out in its general facts, as, after the false membrane had been destroyed, the *patient recovered his hearing*, although the true membrane of the tympanum had disappeared. He says, p. 26, "The passage of the meatus externus, has occasionally been obstructed by an unnatural septum, originating from an elongation or diseased growth of the cutis. As we have been informed, this was the state of the meatus, in a case where the membrana tympani was perfect, and hearing was restored by a laceration of the partition. (*Vide* Mons. Maunoir's communication in the *Medical Journal* for 1800.) I believe these cases are rare, unless the tympanum be diseased, but are not unfrequent after a suppuration and puriform discharge. The following is an instance of its having formed after a puriform discharge:—J. Hallam applied at the Dispensary for a very considerable and sudden increase of a deafness, with which he had been many years afflicted. The deafness had originally been produced by a suppuration of the tympanum; and he recollected, that, during the discharge, air had occasionally passed through the meatus in the act of blowing his nose. The discharge had ceased to flow outwardly, and he was no longer capable of forcing air through the meatus. He now spoke of a particular sensation, similar to what people experience when they inflate the tympanum. By placing the patient in the light of the sun, I perceived a septum, which I pierced and lacerated, after which he could perceive at nine inches the tick of a watch, which he was before obliged to place in contact with his ear. Some difficulty arose to prevent the re-union of parts. It was at last accomplished, and the patient's hearing improved to the degree in which it is usually possessed by those who have lost the membrana tympani.

[To be continued.]

TYPHUS FEVER, TYPHOID FEVER, RELAPSING FEVER, AND FEBRICULA,

THE DISEASES COMMONLY CONFOUNDED UNDER THE TERM CONTINUED FEVER.

ILLUSTRATED BY CASES COLLECTED AT THE BED-SIDE.

By W. JENNER, M.D., Lond.,
Professor of Pathological Anatomy in University College, London, and Assistant Physician to University College Hospital.

DURATION OF TYPHUS FEVER

(Continued from page 115.)

Case 22.—Imperfect history—delirium—prostration—deafness—loss of sleep—absence of abdominal signs—quick pulse—mulberry rash—erysipelatous inflammation of nose, pharynx, and larynx—dulness of right side of chest—friction right pleura—brain healthy—slough on arytæno-epiglottidean fold—post pharyngeal diffused abscess—fluid and recent lymph in right pleura—consolidation right lung—no lesion of gastro-enteritic membrane.

Mary W., aged 42, a native of London, mother of several children; the wife of George W., (Case 3,) and received into the hospital at the same time.

A thin woman, with light hair and eyes and dark complexion. She states that she has often been ill before the present attack,—the nature and severity of the illnesses were not ascertained. Never had rheumatism nor fever; not subject to cough. Affirms that her habits are temperate.

Present illness began on or *about* August 2nd. Her bowels had been regular from the first; she had been very delirious some days before her admission. Her husband, from whom the above particulars were obtained, assured me that "it all lay in the head." No farther history could be learned. On her admission under the care of Dr. Tweedie, the following notes were made:—

August 16th, *i. e.*, about the 15th day of disease, she was very delirious and slept but little during the night; the little sleep she had was disturbed, and she moaned much. Has not closed her eyes to-day; the mind is now dull and confused, the memory very defective, the expression heavy and dull, the complexion thick; there is much vertigo, but no headache as she lies quiet; but when disturbed, as by loud talking, she suffers pain in the head. She occasionally grinds her teeth and knits her brow. She is slightly deaf, and affirms that she has a "stupid" noise in her ears; the conjunctivæ are scarcely more injected than natural, the pupils normal. The nurse states, that, occasionally, the whole face is covered with a dusky flush. She lies ordinarily on her back, but can turn in bed unassisted, though she is unable to leave it without aid. The tongue is pale-brown and dry; she has passed two stools into the close pan and one into bed; much thirst; no appetite. There is neither fulness, resonance, tenderness, nor gurgling of the abdomen. The pulse is 108—very weak; the respirations 28; trifling cough. There is a little sonorous râle on deep inspiration.

The surface is cool, the hands cold, the feet warm since a hot bottle was applied to them. The skin is spotted; the spots are dusky red, not elevated, fade on pressure; more abundant and darker on the posterior than the anterior surface of the trunk; the subcuticular rash is very pale anteriorly; the whole dorsum has a somewhat purplish hue from congestion. Mist. am. acet. 6ta q. q. hora; vin. alb. ʒi. 4ta q. q. hora.

The following day somnolence set in, and continued, with the exception of the night of the 18th day, when she was very delirious, singing, &c., till the 20th day, when she was much more intelligent and wakeful. The prostration increased rapidly from her entrance, so that on the next, *i. e.*, 16th day of disease, she lay constantly on her back, was quite

unable to turn in bed, and permitted her limbs to lie as they were placed. The stools and urine were, at the same time, passed into the bed unconsciously. On the 17th day, when told to show her tongue, she opened her mouth, but made no effort to protrude the organ. The bowels continued relaxed till the 20th day, from three to five dark liquid stools being passed daily. Some redness at the bottom of the spine was noted on the 18th day.

On the 20th day the pulse, which had never exceeded 108, fell to 96, the spots had almost disappeared, and she appeared on the verge of convalescence; but on the 21st day erysipelas set in, affecting the tip of the nose, but chiefly the pharynx and larynx.

The following note was then made:—Pulse 120, very soft; nose slightly red, and swollen at the tip; makes a noise in the nose in breathing; no cough; expiration prolonged; respiration, 30; a little tenderness of the larynx; no swelling of the throat externally; swallows with difficulty some fluid, returns back into the glass; *uvula, velum pend. palat.* and pharynx very red. Tongue only partially and slowly protruded, red, dry, and glazed; one copious stool into close pan.

On the morning of the 23rd day she appeared in every respect better: the pulse had fallen to 100; the expression was improved; she swallowed with much less difficulty; the tongue was more freely protruded; al redness of nose and tenderness of larynx had disappeared; but there was a little vomiting of yellowish fluid. On the evening of the same day the breathing again became noisy; a mustard poultice was applied to the throat.

On the 24th day, at noon, the pulse had risen to 126; the breathing was noisy and laryngeal; expiration prolonged; the voice whispering and guttural, and there was tenderness, on firm pressure, over the larynx; the tonsils, uvula, and velum, were red, swollen, and covered with mucus; fluids remained some time in the mouth, and then were swallowed with difficulty.

I did not see her on the 25th, 26th, and 27th days; but there appears, from the hospital records, to have been little change in the general or local state.

On the morning of the 28th day of disease I made the following notes:—

Pulse very rapid and weak, more than 150; respiration 44, chiefly abdominal, the right side of the abdomen moving much more than the left. There is absolute dulness to about two inches above the angle of the right scapula; comparative dulness to the spine of the same bone; no breath sound, and diminished vocal fremitus over the absolutely dull portion; above that, friction and slightly increased vocal fremitus, anteriorly dulness to upper border of the third rib, excepting about a hand's breadth next sternum; some friction over the same part; no obliteration of the intercostal spaces; the laryngeal symptoms had disappeared; there was trifling cough; the conjunctivæ were pale, the pupils large; there was occasional delirium; profuse sweats broke out about 8 p.m., and continued till death, at a quarter to 4 a.m., on the 29th day of disease. During the last twenty-four hours she did not speak. For two hours before death she rolled her head from side to side. There was no other struggle or convulsive movement.

On the 18th day 3 oz. of gin were given, in addition to the wine ordered on the 16th day, and carbonate of ammonia, in 5 grain doses, substituted for the acetate. A blister was applied at the same time to the forehead. On the 25th day, 1 grain of disulphate of quinine was given, instead of the carbonate of ammonia, and the quantity of wine was reduced to 4 oz. and the gin increased to 4 oz.

Examination, August 31, 1849, of the body of Mary W., 19½ hours after death.

Some Emaciation.—Cadaveric rigidity well marked. Numerous miliary vesicles along the sides of the trunk; a few on the anterior surface. No discoloration in the course of the veins. Very little congestion of the posterior surface of the body.

Head.—The dura mater was somewhat thicker than usual. There was no marked increase in the vascularity of the pia mater. The membranes separated from the surface of the convolutions with normal facility. There was very little serosity in the meshes of the pia mater. The plexus choroides was pale. About half an ounce of transparent serosity was found at the base of the brain. The substance of the encephalon and the central parts of the brain were of normal consistence.

The *tongue* was dry and brown. Much purulent looking fluid was infiltrated between the muscles as far as the left great cornu of the os hyoides and thyrohyoid membrane. Numerous minute collections of a fluid resembling pus to the unassisted eye, were found beneath the *lining membrane of the pharynx*. A slough about ¾ inch in length, and ½ inch in breadth, occupied the free border and the pharyngeal surface of the *right arytæno-epiglottidean* fold. This slough was of a dirty brown colour, tough, totally disorganized; the margin of mucous membrane around was brightish red; the slough was detached with facility, leaving an ulcerated surface, covered with purulent-looking fluid, exposed. The tonsils were rather large, and firm; the anterior and posterior surfaces of the velum and uvula pale. On the under surface of the *epiglottis*, near its root, was a vivid red patch, about half an inch in length. The mucous membrane of the larynx above the chordæ vocales was thickened and roughened; below the chords, pale and healthy, as in the trachea.

There was no fluid in the *left pleural cavity*, and only a few old adhesions at the apex of the lung.

The left lung was healthy and crepitant throughout.

The right lung adhered to the pericardium by quite recent yellow lymph; the free edge of the organ was fringed by similar matter.

The right pleura contained about 6 oz. or 8 oz. of slightly turbid serosity, floating through which was a considerable quantity of yellow lympho-purulent substance. Examined by a ½ inch glass, this substance was found to consist of lymph, containing in its meshes much finely granular matter, and numerous non-nucleated granular corpuscles, about the size of pus globules.

The right lung itself was pale anteriorly, and of a dusky reddish violet posteriorly, especially the inferior portion of the inferior lobe. On section, the posterior portion of the inferior lobe, from base to apex, was of a brownish red colour, flabby, tough, non-crepitant, sank in water, and gave exit to some pale reddish serosity. The posterior part of the superior lobe was crepitant, of a dusky red colour, and contained but little excess of serosity.

The anterior portion of the lung was crepitant for near four inches from its margin; the anterior part of the inferior lobe was coated with recent lymph. On removing the lymph from the pleura, that membrane was seen to be dull white and opaque. The hue varying from mere milkiness to absolute opacity.

There was a similar condition of the posterior part of the inferior lobe.

The *bronchial tubes* contained a moderate amount of serated mucus; their lining membrane was pale. There was no enlargement of the *bronchial glands*.

The *pericardium* was healthy in appearance, and contained about 6 drs. of transparent serosity. The substance and valves of the *heart* were healthy; its consistence good. Much dark loosely coagulated blood escaped from the venæ cavæ and pulmonary veins on section. The right auricle contained a large fibrinous clot; the right ventricle a small fibrinous clot, interlaced among the *columnæ carneæ*. The latter clot was continuous with one in the pulmonary artery.

The left auricle contained a small black and fibrinous clot; the *conus arteriosus* of the ventricle a fibrinous clot, extending into the aorta, where it was moulded to the sigmoid valves. The endocardium was *unstained*. The *œsophagus* was pale, covered for three inches from the pharynx by a dense white layer of epithelium; lower down the lining membrane was smooth and shining.

The cellular tissue at the back of the pharynx and œsophagus as low as the 1st dorsal vertebra was infiltrated with a purulent looking fluid. From this part to the inferior portion of the 3rd dorsal vertebra, the organs contained in the posterior mediastinum, *i. e.*, the thoracic duct, &c., were closely matted together by dense false membrane and lymph.

Examined by the microscope. This purulent looking fluid presented the following elements:—

a. Fat globules.

b. Finely granular matter.

c. Granular corpuscles about the size of pus globules.

Acetic acid dissolved or rendered transparent the chief part of the granular matter; but brought no nuclei into view.

Stomach.—The colour and consistence of the lining membrane of this organ was natural; it was mammillated from near the pylorus to within about four inches of the cardiac extremity.

The *cæcum* and *colon* were distended with flatus; the latter contained a large tapeworm.

The large and small *intestines* were healthy in colour, thickness, and consistence throughout, with the exception of a little increased vascularity of the sigmoid flexure of the colon.

Peyer's patches were indistinctly seen.

The *mesenteric glands* were healthy.

The *liver* was perfectly normal in appearance.

The *gall bladder* was moderately distended with thin orange bile. Its lining membrane was healthy.

The *pancreas* was pale and normal in appearance.

The *spleen* weighed 5¼ ounces; it was pale, much corrugated, moderately tough and flabby.

The *kidneys* were healthy in appearance, except that there were about twenty small cysts on the surface and in the substance of the left. The lining membrane of the urinary bladder was congested, its rugæ being dull red.

The *uterus* and *ovaries* were healthy.

This woman survived till the 29th day of disease. Her case offers a good illustration of the impropriety of confounding the duration of the typhus fever with the duration of the illness. The fever, properly so called, had terminated just before the 20th day of disease. Erysipelas supervened on the 22nd day. Doubtless the pleuritic disease was of the same nature as the erysipelatous inflammation of the skin of the nose and of the mucous membrane of the pharynx and larynx. It has been supposed that erysipelas of the head and face invariably has its starting point from some minute abrasion of the surface. In fever it very frequently, as in this case, appears to commence in the pharynx, and thence extend, by the mucous membrane of the nose, outwards to the skin, and downwards to the larynx. Occasionally, however, it will commence in the pharynx, and a few hours after show itself on the ridge of the nose near the eyes. In such a case, the erysipelas takes its start from two distinct centres, one for the mucous membrane and one for the skin. The dry, red, and swollen mucous membrane of the pharynx was visible during life. The noisy, prolonged expiration, the whispering guttural voice, and the tenderness of the larynx, sufficiently indicated the condition of its lining membrane. The presence of the large slough found after death on the arytæno-epiglottidean fold did not prevent the more prominent laryngeal symptoms disappearing during life. The return of fluids from the mouth into the glass, and the holding of fluids in the mouth for some time before making an effort to swallow, were symptoms which indicated serious lesion of the pharyngeal mucous membrane, and rendered ulceration or sloughing of its surface, or purulent infiltration of the submucous tissue highly probable. The pharyngeal preceded the laryngeal disease in this case, as is the rule. It will be observed, that no pus corpuscles were discovered in the post-pharyngeal abscess. The fluid presented the microscopic appearances generally discovered in similar cases. The distinctive nucleated corpuscles being rarely or ever present, however closely the fluid may, to the unaided eye, present characters of true pus. The miliary vesicles, or sudamina, were preceded by profuse sweating. This eruption is very infrequent on patients more than 40 years of age, and is rarely if ever seen after 50.

Cases 1, 10, 12, and 15 presented no lesion after death; they proved fatal before the 16th day of disease.

Cases 2, 11, 14, and 21 offered lesions too slight to account for the fatal termination; these four terminated before the 21st day.

Cases 5, 8, and 22 proved fatal after the 21st day; examination of the internal organs sufficed to explain the death of these three patients.

Cases 3, 4, 19, and 20 recovered from the fever; the rash in these cases began to fade respectively on the 13th, 15th, 14th, and 18th days.

Cases 6 and 7, in which no rash appeared, were convalescent on the 12th and 13th days respectively.

Taken conjointly, all these cases illustrated the fact that the ordinary duration of typhus fever is from 14 to 21 days; that uncomplicated typhus fever may terminate the life of the patient at any period before the 21st day; that after the 21st day, local lesions, sufficient to account for death, are, as a rule, discoverable.

It will be observed, that 13 of the 21 cases detailed in these papers were part of as many families, more than one member of which suffered from the *same* disease.

The close resemblance of the disease in the brothers J. and B. H., cases 3 and 19, and in the man and wife, George and Mary W., cases 2 and 22, must strike the most careless observer. I have previously alluded to this fact; I will not here repeat.

Although I have stated the duration of typhus fever to be from 14 to 21 days—and I believe that

the disease never exceeds 21 days in duration—it not unfrequently, in very mild cases, terminates before the 14th day, if the fading of the eruption be taken to be the index of the termination of the disease. The general symptoms in these cases are invariably exceedingly mild. There is nothing anomalous in this short duration of a specific disease which ordinarily lasts a longer period. In scarlet fever we occasionally see cases in which the eruption disappears in a day or two after its first appearance, the patient experiencing scarcely a single symptom of general illness.

In my next paper I shall commence the subject of typhoid fever.

PROGRESS OF MEDICAL SCIENCE.

FRANCE.

[From our Paris Correspondent.]

INDIAN HEMP IN A FRENCH CAFÉ.

Although the French be, perhaps, the most inventive people in the world, they are very slow to receive the inventions of others. Even in Medicine, to the progress of which they have contributed so much, this strange slowness is manifest. Many years often elapse before the discoveries of foreign Medical men become generally known to the Profession in France; and any foreign medicine, however valuable, it is impossible to obtain in Paris. Blue pill, for example, you cannot get, though we have English dyspeptics in abundance; and how they contrive to digest the Republic without that universal soother of disordered assimilation, is to me a mystery. Now, if blue pills, black draughts, and other national *deliciæ* of a like kind, be unknown here, you can readily imagine, that Indian hemp, coming as it does, like the cholera, from the banks of the Ganges, far beyond the seas, is equally unknown; the more so, that the French have a special aversion to everthing which comes by water, because their *forte* lies not in that line. They have, it is true, a bastard kind of bang, called Hashish, which comes from Africa, and of which one might take a hatful without inconvenience, but the true Cannabis, I repeat, is still a stranger here. Yet the materia medica contains few more powerful preparations; and, as it is said to act differently on different organizations, a brief account of the first trial made with it in France may be acceptable. The account comes from the medical man who administered the remedy.

The first case in which the Indian hemp was tried, was one of violent gastralgia, accompanied by spasmodic action of the abdominal muscles. The disease was of long standing, and the various remedies hitherto employed to relieve the immediate violence of the pain in the stomach had ceased to produce any effect. Ether was of no avail, and, from the suddenness of the attacks, opium had no time to act. The tincture of Indian hemp was now tried, and invariably gave relief in about half an hour. It was, however, rather old, (having been prepared nearly twelve months,) and was consequently borne in large doses, without ever having occasioned any disturbance of the intellect. On one occasion, the patient, a young married lady, twenty-six years of age, took *six* tea spoonfuls of the tincture, *coup sur coup*, before relief was obtained. This last dose exhausted the stock, and some freshly prepared extract having been procured from London, was converted into a tincture of which every twenty drops contained one grain. An opportunity soon offered for trying this fresh extract on the patient alluded to. The attack of gastralgia came on about seven o'clock p.m., and twenty drops of the tincture were immediately exhibited in half a wine-glass of water. Partial relief was immediately obtained, but the full effect of the remedy did not show itself until three quarters of an hour had elapsed, when the patient, after one or two hysterical laughs, fell suddenly into a state of most complete insensibility, like that which results from chloroform. This lasted for a few minutes only; as the patient then recovered, again fell into the same state of insensibility, which was of equally short duration, and on awaking was delirious. For five hours did this strange hallucination, peculiar to Indian hemp, continue, without interruption, the patient laying down the law like a judge, or breaking out into violent invectives against her "foreign" doctor, who presumed to make her precious body the subject of vile experiment. This state of delirium continued up to one o'clock, when the patient fell off into a tranquil sleep for the rest of the night. She experienced no inconvenience whatever on the following day, though a delicate and highly nervous person. A few days afterwards the same delirium was produced by a dose not exceeding ten drops, (but five drops had been taken three hours before,) and here the effect of the remedy was instantaneous. The gastralgic spasm was of the most violent kind, the unhappy patient crying out that she was at the point of death, and demanding relief at any risk. Scarcely had the dose of hemp been swallowed when the hysterical laugh, before noticed, broke out; a sudden flush illuminated the pale face of the sick woman; her dark and beautiful eyes shot forth fire, as if an illumination had been suddenly lighted up within, and a pleasing delirium, accompanied every now and then by joyous laughing, continued for several hours. The effect of the remedy on the disease was also *instantaneous*. From the moment delirium set in, all pain vanished from the stomach, and the patient was unconscious of the deepest pressure on the affected part, though previously the weight of the bed-clothes, even of the chemise, seemed intolerable.

But we now proceed to the physiological effects of the hemp. Finding it so strong, the physician alluded to in a former part of my letter, resolved upon trying it on the neighbours. He therefore betook himself, with about fifteen grains of the extract, to a *café* close by, to the *habitues* of which he was well known. It was *Mardi-gras*, and copious libations of flaming punch had prepared the natives for anything or everything. Monte Christo, besides, had made the wonders of Hashish familiar to them, and all were anxious to test the properties of the unknown drug. Not more than a single grain was given to each. Some bolted it like a bolus; others smoked it; one individual merely smeared about a quarter of a grain over his cigarette paper. About one grain was dissolved in a glass of Curaçoa, and this was allotted to the master of the house. His two young and handsome daughters were forbidden to taste of the drug; but the physician had here evidently forgotten his Scriptural history. About three-quarters of an hour passed quietly over, and the curious were rapidly lapsing into credulity, when a short laugh, followed by an awful and most piercing shriek, issued from an inner apartment. The youngest daughter, following traditional example, had tasted of the forbidden object, and was suddenly struck with delirium and hysterical movements of a very alarming appearance. Consciousness was only half obliterated, and the mind seemed to make supernatural efforts to escape from the chain about to be thrown around it. The shrieks were rapid, most violent, and of a peculiar kind. The girl felt conscious that she was raving, and earnestly entreated all around her not to conclude that she was mad; each appeal being terminated by a heart-rending scream. Some internal sensation also compelled her to cry, every now and then, that she was dying. With great difficulty, she was conveyed to bed, where the delirium continued for four hours, all her little love secrets, &c., being revealed to the astonished auditors. As if a signal were set by this mischance, the young men in the *café* went off about the same moment. The effects were not, however, so violent. They were extremely varied. The individual who had smoked some hemp (half a grain) in his cigarette, was suddenly attacked by violent fits of laughter, which compelled him to roll on the floor, during which he exclaimed, that something was raising him up to heaven. These fits, resembling hysteria, did not last more than ten minutes.

Another individual, instead of being agitated, fell suddenly into deep sleep, bolt upright against the wall, with the chin sunk on his chest, and the features in the most perfect calm. Were it not for the deep, slow inspirations, one would have thought him defunct, for the face was deadly pale. So profound was the sleep, that it continued for three hours, despite the shouts and screams of the excited bacchanals who danced around him; for, in the majority, the hemp merely produced intoxication. In all, the excitement was soon followed by an invincible tendency to sleep; the benches were strewn with the slain, and delightful dreams, producing strange laughter, repaid the adventurous tasters for their curiosity.

GERMANY.

[Berlin Correspondence.]

MEDICINE AND POLITICS.

It is a favourite custom, as you are aware, with the public functionaries of this country, to celebrate the 25th and the 50th anniversaries of their entry in the service of the State. Some physicians, not in the public service, thus solemnly celebrate the same periods in their doctorate. A ceremony of this kind recently took place in our Friedrich-Wilhelms Institut, (the School of Military Surgery,) the chief of which, M. Lohmeyer, the principal Physician of the Army, has entered the 50th year of his public service. This fête, which, prior to 1848, would have had a patriarchal and peaceable character, has, in our days, become a political demonstration. M. Casper, a well-known Professor of Forensic Medicine, pronounced the opening discourse, in which, alluding to the double character of the *jubiliaire* of physician and soldier, he endeavoured to show, that science and the army are the strength of Prussia, and that it is to these two united and most estimable agencies, that the recent triumph of the Government was owing. Thus the *medicina militaris* was made *medicina militans*.

I will now give you another example of political *furor* in our peaceable art. The son of one of our Deputies, who is about to take his degree as a Doctor of Medicine, has published a dissertation *De morbo Democratico, nova insaniæ forma*. The announcement of the public promotion, where, according to custom, the candidate must defend his work against any one who may choose to attack it, drew a crowd of literary men, whose democratic spirit was equal to their capability of speaking in Latin, all anxious to chastise this apostate of the youth of the schools, the *gardes du corps* of the popular party. But the Democrats, as has often happened to them, were deceived. The young Doctorandus, probably frightened by the crowd of bearded enemies, took refuge behind a pretext of M. Casper, the Dean of the Faculty, who adjourned the ceremony to an unknown period.

GERMAN UNIVERSITIES.

With respect to the condition of the faculties in this country, we are aware of a marked decadence in that of Konigsberg. This University, the *avant-póste* of German civilization towards Russia, formerly so celebrated for its brilliant series of Professors who attracted a crowd of students, is now frequented only by those pupils of the Eastern provinces, who are too poor to attend Universities in other provinces. The Faculty of Medicine suffers especially. With the exception of Rathké, the Professor of Anatomy, and of Dulk, a distinguished chemist, the chairs are entrusted to men of inferior merit, so that the number of pupils attending the clinical lectures is rarely more than eight or ten.

M. DE WALTHER

The celebrated surgeon and oculist of Munich, died lately from typhoid fever. The University loses in him an excellent preceptor, ssience an assiduous cultivator; the town a very ckilful practitioner, and the country an intrepid defender of its liberty. The journals state, that this man, who during a practice of forty years, was very determined towards his patients, refused, during his last illness, to take any medicine at all, rejecting even *eau sucrée*.

PROGRESS OF TYPHUS.

From Austria, whence we are accustomed to receive painful intelligence, we learn that the typhoid fever, which was at first restricted to the barracks in Hungary, the Italian provinces and the Archduchy, has just broken out among the population of several towns, amongst others at Karlsbad, and at Vienna, where a large number of medical men, it is said, have been attacked. In the hospitals at Theresienstadt and Josephstadt half the medical men have fallen victims to the epidemic. It is asserted

that the bad treatment of the Hungarian prisoners, transported into the different provinces of the Empire, has been the principal cause of the epidemic.

THE TINCTURE OF IODINE.

Among the *remedia mirabilia*, such as chloroform and collodion, which are daily more and more freely used in surgery, we may class the tincture of iodine. The following is an extract from a small pamphlet published at Berne, containing a *resumé* of the cures obtained by the external use of this tincture in the practice of M. Demme, Professor of the Faculty in that city.

M. Demme prefers a tincture made with one drachm of iodine to an ounce of the strongest alcohol, to the ordinary tincture, which contains about 48 grains of iodine in the same quantity of liquid. He applies it to the healthy or diseased skin to any extent. In acute cases he uses it twice or thrice a day, in chronic cases every second day. After it has been applied he leaves the part uncovered until it is quite dry; it is then covered lightly. Vesication is to be feared, because it prevents absorption of the tincture; when it happens, it is treated by fomentation with Goulard water, wine, &c. It not unfrequently occurs when the skin has been softened by poultices or by the perspiration, as in the armpits, &c. In such cases it is better to precede its application by an inunction with oil, which greatly assists the absorption of the tincture.

The action of the tincture of iodine applied to the skin is essentially antiphlogistic. M. Demme uses it in all cases of inflammation falling within the domain of surgery, no matter what may be the cause, degree, or period of development. The serous exudations alone often resist this energetic treatment. M. Demme has found it eminently serviceable in idiopathic and traumatic erysipelas, whitlow, burns, frost-bites, and in inflammation from wounds or chemical agents. In inflammations of the subcutaneous cellular tissue, the tincture of iodine has been very successful. In the great majority of cases, not only has the inflammation been rapidly cured, but the pus which had been already formed has suddenly disappeared—a great advantage in mastitis, parotiditis, and other inflammations where it is advisable to abstain from the use of the knife. The arthrocaces, as also all sorts of inflammation of the joints, except arthritis, have yielded to the tincture of iodine, so also have buboes, whether of a syphilitic origin or not, phlebitis, and scrofulous inflammations. In gonorrhœa, the experience of the Professor is still doubtful; he applies the liquid in a line extending from the frœnum preputii to the anus. We may add, in concluding, that the tincture of iodine so hostile to morbid plasticity, is of marked service in promoting ossification, when the formation of callus, after the fracture of a bone, is tardy or vicious.

HOMŒOPATHY IN AUSTRIA.

The Austrian Government has just established an institution for teaching homœopathy. The direction has been entrusted to Dr. Wurm, who possesses a high homœopathic reputation among the Viennese. This is, as far as we know, the first occasion on which this sect, which in the eyes of laymen covers charlatans by its attractions of the *ecclesia pressa* and martyrdom, will descend into the scientific arena to prove or not its right to existence. Nowhere would the *therapiia minima* have a greater chance than at Vienna, where, as regards medicine, all is taught in perfection, except the art of healing. There is not any school in Germany which has better Professors for the use of the stethoscope, and for anatomico-pathological researches, and which at the same time neglects more disdainfully the Hippocratic traditions, than that of Vienna. Here is, by way of example, a passage from a book recently published by one of these *esprits forts*, M. Dietl, who is known by his anatomico-pathological researches on the diseases of the brain, and who, in his last work, endeavours to prove that in pneumonia, bleeding is superfluous, if not injurious.

"Coming from the school of Raimann," says the author in his preface, "I belonged to those rigorous antiphlogistians, who believed they were most successful in the treatment of pneumonia. In 1831, I dared treat some severe cases of pneumonia homœopathically. But not having yet the courage to wait for the natural progress of the disease, I did not abstain from the use of the lancet, when, with the increasing dyspnœa and anxiety of the patient, I became anxious myself. Then, as in the majority of cases, bleeding caused a marked relief. I returned cured of my heresy to the old flag of antiphlogisis."

"From these facts the treatment by tartar-emetic gained numerous followers, and it was this which first strongly shook the faith in the absolute necessity for venesection. • • • • Seeing, according to my experience, that even those recovered in whom tartar-emetic did not induce vomiting, and having no reason to seek for the efficacy of this remedy other than in its emetic power, I determined to reject both bleeding and tartar-emetic, restricting the therapeutics of pneumonia to an expectant and dietetic treatment. For, as regards the nitrate of potash, neutral salts, and tartar-emetic in small doses, I had long since ascertained that they had no influence on the progress of pneumonia. I have followed this practice for three years without exception. During that time I have not drawn one drop of blood from a pneumonic patient, nor administered other medicines than the decoction of sago, infusion of liquorice, an oily mixture, or an acidulated draught, unless there were complications compelling me to make an exception."

The re-establishment of public brothels is still *sub judice*. The Government, fearing to injure its Christian character by sanctioning immorality, hesitates to do justice to the solicitations of the Medical body. An association of Medical men, urged on by the immense progress made by syphilis, are about, it is said, to institute a Lock Hosptal.

SCOTLAND.

[Edinburgh Correspondence.]

This winter has been remarkable, not merely for the severity of the weather, as regards cold, but also for the suddenness of its vicissitudes. As is commonly the case, the general character of the weather has been very much the same all over the island, though not a little modified in particular places by local causes. In the cold winters of Great Britain at large, Edinburgh often suffers less than places further south. And it has been remarked, not unfrequently, that the freezing temperature travels to Edinburgh from the south, owing, as it has been conjectured, to the proximity of the southern part of Britain to the Continent, and to its consequent more ready participation in the cold of the continental winter. For a number of years past Edinburgh has enjoyed a remarkable exemption from deep snow; and even this winter there has been but little. When high winds make a prominent part of the winter, this town, owing to its lofty position, has fully its own share of them. The mean temperature of January for Edinburgh differs so little from that of London, as shown by the Greenwich observations, that the difference may depend solely on the mode of taking the observations. That for Edinburgh, as indicated by a register thermometer and two additional observations, morning and evening, in an exposed situation facing the north, within the town, but one storey above the street, is a small fraction above 34°; that for London is a small fraction less than 34°, as may be found by the Tables appended in the *Medical Times* to the weekly Mortality Returns. The mean daily temperature on the first five days of January was for Edinburgh 36°, 42°, 34°, 33°; and for London 31·3°, 33·6°, 37·6°, 43·4°, 34·0°, giving a mean, during this period, for Edinburgh, of nearly 38°, and for London, of nearly 36°. During the next sixteen days, with considerable variations of temperature, though still generally below the freezing point in both places, the difference is still a small fraction in favour of Edinburgh, the mean for Edinburgh being 30·6°, that for London 30·4°. During the remainder of the month the mean temperature being generally above the freezing point, there is still a small fraction in favour of London, the mean at Edinburgh being 37·9°, that at London 38·1°. The comparison of the temperatures for January, in the two Tables just made use of, hardly bears out the remark referred to above, namely, that the freezing temperature usually occurs later at Edinburgh than at London, or that it travels from the south northward. Thus, on the 6th of January, the temperature sunk in both places simultaneously below freezing, and the mean on that day is one degree lower for Edinburgh than for London, namely, 30° and 31°. The lowest mean for any day of January at London was on the 15th, when it was 25·5°—on that day the mean for Edinburgh was 27°. Two days after, or on the 17th, the mean for Edinburgh was 25°, and the mean for London on that day was 33°.

The weather all over Europe appears to have been particularly severe; the accounts from Rome, and even Naples, describing the cold as of unusual intensity. Even at Constantinople the cold is much complained of, and it is announced that the report of the inclemency of the winter in Egypt has detained, at Malta, not a few English invalids who were on their way to winter in that country. With all this severity and inconstancy of the weather, the public health is good with us, as it is in London. Sanguine people are apt to ascribe the decline of diseases this winter to the influence of the sanitary measures taken during the late Cholera scourge, imperfect as these undeniably still are. Nobody can doubt the important effect of these measures. But we must not flatter ourselves that the explanation of the rise and fall of diseases lies so much on the surface. We are still far, very far, from being able to connect what is called the Epidemic Constitution of the year with causes that stand within our knowledge. Variations in the composition of the atmosphere, in connexion with the disposition to particular diseases, it is to be expected, will be brought to light by more refined methods of chemical analysis. Ozone, to which the attention of the readers of the *Medical Times* was called in the last number, as alleged by Schoenbein to be a source of catarrhal affections, must be further inquired into, and more ozones in the atmosphere must be sought after. One thing we may rest assured of: every variation in the number and character of diseases in different years must have its cause—what we seek after most surely is not merely an ideal existence; it is certainly in every case something real, whether it be or be not within the reach of man's powers of discovery.

But, independently of any assumed variations in the composition of the atmosphere, the laws of atmospheric vicissitudes presents a subject of the greatest interest in medicine, to which it were to be wished that the Profession could devote an efficient attention. By members of the Medical Profession, the science of physiology has been brought to its present state of advancement; by members of the same Profession the great foundations of modern chemistry were laid; and meteorology is a science which probably includes truths of hardly less important bearing on practical medicine than those of the two sciences just named. To most of us, indeed, the problem of the weather seems to be too remote from solution to be of much present promise in regard either to the eteology or treatment of diseases. But there are practical benefits which could not but attend the mere pursuit of its solution. Among these are a more extended knowledge of the subject of climate, with a view to the choice of a winter residence for invalids appropriate to their state of health. For, much as has been done to improve this kind of knowledge, it is still far from being understood sufficiently to prevent serious errors being very often committed; even when these do not arise from the difficulty of ascertaining the precise condition of the disease and the exact character of the patient's constitution.

The point in the law of the weather, the discovery of which would be of most immediate service in the practice of medicine, is that which may be found to determine the occurrence of severe winters in Italy and the other places to which invalids resort to escape the inclemency of the ordinary winter at home. There can be no doubt that a severe winter in Italy, such as the present is described to be, is much more detrimental to many invalids than a residence in this country with the ordinary comforts of an English home. If we can make no progress towards this law, we may, at least, apply the calculation of chances to the question by summing up the number of severe winters in Italy during a given period of years. But the

problem itself has hardly been studied, with the necessary zeal, on proper grounds. The most ingenious and honest of our Almanack-Makers have been mere visionaries. It is long since we were sick of Murphy, *et hoc genus omne*. The problem, however, does not appear to be beyond the reach of inquiries stimulated by the hope of reaching a discovery of practical benefit. A promising direction for inquiry is, in the variously modified effects of gravitation through a series of years, as the equilibrium of the ocean is restored from the disturbance caused by the unequal application of heat in the torrid and frigid zones.

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THE MEDICAL TIMES.

SATURDAY, FEBRUARY 23, 1850.

*** We have to request that all Communications for the Editor be addressed to the care of Mr. JOHN CHURCHILL, Medical Publisher, 46, Princes-street, Soho, by whom, in future, this Journal will be published.

THE Coroner's Court is becoming the theme of criticism. Its utility, its abuses, in due time will be tested. The adaptability of the machinery to the end will be investigated, and such reforms effected as may seem to be most urgent and desirable. This Court must be brought within the sphere of modern improvements; and made to dove-tail into the new Sanitary system. The cause of death is the subject of inquiry before these Courts, Medical evidence is the testimony to be examined and compared, and before all things we must have *Medical Coroners*. Lawyer Coroners, or *Sub*-Coroners, must be repudiated. Let Medical men, in every instance, contest the office with the lawyers, and if the Profession will hold stoutly together, and subscribe, if need be, to turn out Lawyer Sub-Coroners, as they have heretofore subscribed to bring in Medical Coroners, they will vindicate their just rights in a very efficient manner, and inflict a severe blow upon meretricious office-hunters, who have no qualification for the duties they undertake but patronage and nepotism, exercised, perhaps, in wilful betrayal of the sympathies and interests of the Profession. Every Coroner, too, should be required to attend personally to his duties; or, if totally unfitted by illness, or any other cause, he should resign. If he be a Medical Coroner, his subordinate should be also a Medical man; for a principle put forth as good in the major instance, must be equally good in the minor, and must not be taken up and laid down as personal advantages may be served.

Under the present system, the *parish beadle* is the officer who informs the Coroner of cases that may require a medico-legal investigation; and his information is often gathered from the mere gossip of the neighbourhood, and the Coroner is required to adjudicate upon village-pump scandals. A MEDICAL Inspector of Deaths, performing the same duties as the present Registrar, should be appointed and empowered to convey the necessary information to the Coroner, and also to make the *post-mortem* examination, in concert with the ordinary medical attendant, when an autopsy may be required. This examination should be always made in the presence of the medical attendant on the case, who should be remunerated for the trouble. Medical men have been ignominiously shut out from Medical Coroner's Courts in former times, on the ground that they might by possibility be the criminals. This excuse ought never to be permitted to govern the proceedings of a Coroner, for it regards an innocent man, against whom no charge has been made, as a felon, and is an insult and injustice to the whole body of the Profession.

If Medical Inspectors were appointed there would be fewer inquests held than at present; and although the Coroners' office might not continue to be quite so lucrative, the change would be a great boon to the Profession, and afford greater security to the public. Coroners also should be paid by a *fixed* salary rather than by fees. Wherever the fee system prevails the public are taxed for its support. The Court of Chancery is the *beau ideal* of the system, and is the great legal iniquity of the age. Mr. Payne, the Coroner for the City, has already pronounced an opinion in favour of payment by a fixed salary, and since he has accorded his assent to the plan, it is probable that the change is not distant. If a fixed salary should be voted in the City the example would be speedily followed throughout the country; and the present practice, so open to abuse and wrong-doing, would be abolished.

Whatever opposition might arise from "vested interests" to changes such as these, we are quite satisfied that they would be approved by the Profession, and be advantageous to the Public interests.

POOR-LAW MEDICAL OFFICERS.

WE hope that the efforts of the Poor-law Medical officers to obtain a redress of their grievances will not languish. They have a hard battle to fight; the Boards of Guardians are their enemies; the Poor-law Commission is a lukewarm sympathiser; the Parliament is a Convention of Guardians, and, therefore, hostile to their claims; the public are indifferent, and, if they run through all sections of society, they will find that they have no friends but themselves. They will be strong, however, if they unite, for the Government must listen to the complaints of 3,000 of the most important officers of the public. The annual election of Medical officers is their weakness; as it places the onus of the evils upon their own acts. The fact of candidature is assumed as an admission of the equity of the terms of their office, and Boards of Guardians and the Poor-law Board do not hesitate to retort this argument against every representation of suffering and injustice. They will not take into account the private fears that impel the Practitioner to seek for the office he would otherwise disdain, but content themselves with stating a fact, to excuse and maintain the wrong that creates it. If the Medical Officers throughout the country were simultaneously to resign, the moral effect would be irresistible, and the injustice they suffer would be brought out in such bold relief that reparation would be speedily accorded. Failing this, the Committee of Poor-law Medical Officers have considered the propriety of separating the administration of medical relief from that of general relief, and of placing it under the jurisdiction of a distinct Board. We trust that the Medical Officers throughout the country will give this matter their serious consideration, and will support the central Committee in their philanthropic and judicious exertions. They must not be supine, and imagine that things will go on well enough without their help. No man's aid can be spared; and as another Parliament has now assembled, let it be shown what the Union Surgeons expect, and what they are prepared to urge upon the attention of the Legislature.

THE HUNTERIAN ORATION.

THE usual routine of the Hunterian Oration has been diversified by one or two singular incidents. In another part of our Paper will be found a report of an attempt which was made, immediately before the entrance of Mr. Skey into the Lecture-room, to induce the assembled auditors to give expression to some manifestation of disapprobation at the conduct which the College had adopted in respect of Medical Reform. The good sense and gentlemanly feeling of those who were witnesses of this ill-timed proceeding, at once put down the impertinent intrusion of the would-be agitator. Whatever might have been the feeling of the audience as to Medical Reform, every one felt that it was not fair to make the Hunterian Lecturer expiate the sins of the College, nor to allow the hour devoted to do honour to the memory of the great Hunter to be expended in a noisy and useless demonstration. The most ardent Reformer knew the battle between the College and the Profession was to be fought on other ground.

A curious coincidence gave some interest to this attempt to interrupt Mr. Skey in the discharge of his honourable duty. A contemporary Medical Journal anticipated its usual publication, and issued its weekly Number on the morning of the day on which the Oration was to be given. In the Leading Article of that Journal, the Members of the College were covertly incited to testify their disapprobation of the recent College Manifesto, and, in order to stimulate its readers still more, Mr. Skey was referred to by name, in one of those ingenious "Notices to Correspondents" in which our Contemporary delights, as an obnoxious Councillor who had voted against the proposal for a new Charter.

The Editor of the Publication alluded to and the discomfited agitator were then evidently of the same mode of thinking, and we must beg to offer to both of them our condolence for the very peremptory manner in which their suggestions were refused. The Journal might have saved its hurried publication, and have given a Leading Article in grammatical English, and Mr. Lee might have spared his demonstration, and have avoided the mortification of being cordially hissed. Both may learn, from this little lesson, the wisdom

of not exaggerating the influence they can exert, nor of deeming that educated gentlemen are to be excited like the ignorant audience at a metropolitan election.

Another still more strange occurrence has since come to light. In the daily *Times* appeared a Report of Mr. Skey's oration, in which occurred the following sentence :—

"The untimely end of the lamented Mr. Morton was dwelt upon with the most feeling eloquence. Several moist eyes were noticed, when the learned orator alluded to the blighting influence of University College in connexion with the unfortunate deceased, who, deprived of the prospect of advancement at the Institution to which he had been so long attached, in a moment of despair, sought, at his own hand, relief from his suffering and anxiety, at the early age of thirty-seven."

When we read this sentence in the *Times*, we were not a little astonished. We had listened to the Oration—we had made arrangements for an accurate report of it, and we had neither seen moist eyes in the theatre, nor had we heard Mr. Skey adopt the ridiculous expression of "*the blighting influence of University College.*" If we were able to form any opinion at all, it was, that the audience generally disapproved of the allusion to Mr. Morton's melancholy death ; yet we could not have supposed for a moment the reporter of a paper like the *Times* would have infringed the well-known rule, of never attributing to any one words which had not been used. Knowing well the anxiety of respectable editors to procure always faithful statements of what passes at public meetings, and to correct any accidental errors which may creep into their reports, we could hardly conceive that the *Times* reporter would have gone out of his way, and have attributed to Mr. Skey not only words which Mr. Skey did not use, but which, from its constant use by one of the Medical Journals, has become very familiar to the members of the Profession.

Yet actually this appears to have been the case. When the sentence in the *Times* was brought to the notice of the authorities at University College, two members of the Senate were directed to wait on Mr. Skey, and request an explanation. Mr. Skey, as appears from a Letter in the *Times*, from Professors Malden and Key, at once "gave his authority for stating that the terms, the 'blighting influence of University College,' proceeded from the Reporter only." The words actually used were given almost verbatim in our report.

It does, then, really appear that the *Times* Reporter interpolated a sentence, and, curiously enough, this sentence happens to be that pet phrase which Mr. Wakley seeks, on all occasions, to apply to University College. We have, on a former occasion, referred to the absurdity of this term, "blighting influence," which means nothing, but seems to mean a great deal, and, therefore, just suits our worthy Contemporary, who is always

"Full of sound and fury, signifying nothing."

To say the least, this interpolation is very singular, and would tend to show, that the *Times* and the *Lancet* occasionally employ the same imaginative pen. If so, we hope, for the credit of the daily Press, that the *Times* will look out for some more common-place individual, who will content himself with ordinary reporting, and not wander into the realms of fancy. As having made one of the reputed moist-eyed audience, we rather object, sorry as we were for Mr. Morton, to be represented to the public with eyes red with weeping when his death is alluded to. We do not like to trust to the accuracy of a reporter who is carried away by the intensity of his feelings. He may be very tender-hearted, but he certainly sees a little crooked. Nor do we like to have our faith shaken in the accuracy of the reports in the *Times*. However, even Jupiter nods sometimes, and yet is not the less, Jupiter. Yet, if the Olympian Deity turned out very drowsy, there might be a conspiracy, even in Heaven, to keep him wide awake.

THE ABERDEEN COLLEGES.

Our attention has been drawn to sounds of discord issuing from the quiet city of Aberdeen, the subject of strife being one which somewhat interests the Medical Profession at large. The two Colleges of Aberdeen, each of which includes a Medical School, are engaged in deadly warfare. We recommend this local contest to the attention of the Peace Society. Here is a case on which to try their 'prentice hand. We do not, indeed, anticipate that the belligerent parties will come to blows; yet, to avert such an indecorum, we confess we trust more to the fear of the "posse comitatus" than to the discretion of the two factions. Aberdeen has the singular good fortune to possess two Colleges, each of which claims to be an independent University. Each has long exercised the privilege of granting Degrees in Arts, Medicine, Law, and Divinity. The elder sister, namely, King's College, has the advantage of deriving its foundation from a Papal Bull, not far from 400 years ago, and its authority to grant Degrees, in all departments, is undeniable. The younger sister, Marischal College, is about a century younger. It owes its origin to a Scottish nobleman, his charter being confirmed by Royal authority and by the Parliament of Scotland, at the time of its erection. In the original charter, an express authority is given to Marischal College to confer the Degree of Master of Arts, and the confirmatory Act of Parliament grants "all the freedoms, franchises, liberties, free privileges, and jurisdiction, that to a free College within this realm, by law and practice, is known to appertain." The partisans of King's College, notwithstanding the apparently ample concession thus made, have all along contended, that Marischal College has no authority to grant Degrees, except in Arts. The present contest, then, is an old feud, stirred into life by some recent circumstances. We have before us a pamphlet of fifty pages, issued lately by a Committee of the Senate of King's College, detailing all the knotty points of this controversy; two Aberdeen newspapers, showing up the delinquencies of both parties; and letters from private individuals, urging on us their respective opinions of the merits of the case, as well as the alleged demerits of both Colleges. We wonder that two bodies, composed of individuals so respectable as the Aberdeen Professors, cannot solder up their differences without appealing to the public by pamphlets. The points at issue are not of the kind on which the public can decide. The law alone can settle such questions, if a compromise be resisted. And it appears that there is at least one legal decision bearing on the subject. In an appeal to the House of Lords, it was decided that the Degree of Doctor of Laws, given by Marischal College, was a sufficient qualification for an office to which such a degree was a pre-requisite. The King's College party, however, offer some technical objections to the effect of this decision. But among reasonable people what should prevent a compromise? We cannot help telling the Professors of Aberdeen, that the perpetuation of such a contest is not creditable to them. Why do not they take steps to have the two Colleges united into one University? It is already more than two hundred years since such a union was declared, by a Royal Charter and an Act of Parliament. though accidental circumstances put an end to their force. The two Colleges were united by a Charter granted by Charles I., afterwards ratified by an Act of Parliament. But, at the Restoration, a general Act rescinded all the Acts and public instruments made during the six years preceding 1648 ; so that this union between the two Colleges fell to the ground. We are not, indeed, acquainted with the secret history of the cabals and factions within the two Colleges ; but we are sure it is most unseemly for two bodies of instructors of youth to go on fighting, year after year, like rival shopkeepers. In the eye of the public, both Colleges are on an equality, and we cannot see anything in the position of either to prevent it from joining cordially with the other. We can fancy that King's College piques itself on its greater antiquity, and on the honour of being a child of the Papal See, while Marischal College, being in the new city, stands upon its gentility, wishing to keep aloof from its neighbour. The Professors of both Colleges should try to see themselves with the same eyes with which the rest of the world looks upon them, and then they would soon discover how necessary it is to their real dignity and respectability that they should return to that state of quietude and peace which alone becomes a seat of learning.

ORDER OF THE BATH AND NAVAL AND MILITARY MEDICAL OFFICERS.

We have repeatedly called the attention of the Government to the rightful claim of the Profession to share in the distribution of the honours awarded for meritorious public services; and it is with pleasure, therefore, that we quote the following from the *Times* of Thursday last :—

"Sir D. L. Evans asked the First Lord of the Treasury the result of the consideration of Government, promised during the last session, respecting the conferring of the military class of the Order of the Bath on Medical Officers who might have been present and proved deserving in important naval and military actions?

"Lord J. Russell said, the subject had been brought under the consideration of the Commander-in-Chief, the Duke of Wellington, who had paid great attention to it; and, a few days ago, he had made a recommendation to the Government, which was now under their consideration."

We have little doubt that His Grace the Duke of Wellington, who has experienced in his own person the sweetness of well-deserved reward, will have recommended to the Government to confer upon Medical men in both ser-

vices those honorary distinctions to which they are fully entitled. It is true that their duties are not of a kind to call forth the loud and general acclaim which attends His Grace wherever he appears—the sons of Surgical science, and the more immediate alleviators of suffering, pursue their course in a more silent manner; but, unquestionably, for that very reason are still not the less deserving of all the benefits it is in the power of the Government to bestow. We wait, therefore, with patience and confidence, the result we expect to arise from His Grace's recommendation, and the good sense of the Government.

THE REGULATIONS OF THE COLLEGE OF SURGEONS.

Since the College of Surgeons has resolved to treat with indifference the wishes of the great body of its members, there is no measure left to the latter but a steady and uncompromising agitation for their rights. There must be a coalition of parties, as was originally effected by the National Association. If the principles agreed to at the Conferences at the College of Physicians are to be contemptuously disregarded, let all earnest men unite once more upon the wise and fundamental principles,—representation, protection, and equal rights, upon which all are agreed. Particular views must merge into general principles. This time there must be *no concessions*. Never again, for the sake of peace, will we arm the Council of the College of Surgeons with weapons to destroy ourselves. In a contest with honourable men, magnanimity is a virtue; but with such opponents as those whom we have hitherto been matched against, it is a weakness. The experience of the past will make us wise for the future; and the College must understand, that in the coming war there shall be NO COMPROMISE!

The *local Associations* attached to the National Institute must be re-organized, and prepared to move at the first warning. So soon as it shall be clear that the College, or the Government, intend to take a decided step in Medical legislation, the Home Office and the House of Commons should be assailed with *Petitions*, so that the will of the Profession may be thoroughly understood upon the question. If the Profession are apathetic, they will be defeated, and will have to groan for another generation, under the incubus of corporate misrule. It would be easy for us to show, that the Council of the College of Surgeons has ever been systematically selfish and unjust, and has more than once broken faith upon public questions for the purposes of self-aggrandisement. We may do this hereafter, but we shall now remain content with assuring the Profession, that no trust can be reposed in that body.

Meanwhile the Licentiates of the Apothecaries' Society will not remain indifferent to their position. Let them move in this matter as becomes them, and demand a re-organization of the Profession upon a basis that shall secure all their present rights, not to themselves alone, but to the General Practitioners at large, and that shall advance also their Corporate respectability. The Apothecaries' Society is under a great responsibility; and although, for some time past, in consequence of the attraction of more interesting questions, its duties have been allowed to slide from notice, yet, if a new agitation should commence, this body will be called upon to play a prominent part, and we hope that it will respond nobly to the wishes of its Licentiates. The Act held by this Society is the corner-stone of sound Medical legislation, and must not be surrendered unless all the good which it contains be imbodied in a new measure. For the rest, the Profession must unflinchingly persevere in their efforts to make such measure as liberal and complete as possible.

We need hardly reiterate, that the proposed "Regulations" of the College of Surgeons do not touch the question of Medical Reform. There never was such an abortion, and the old nurse—whose functions were performed by a Contemporary—is actually ashamed to acknowledge the bantling. She threatens to leave her place in the service of the College, and to offer herself once more to the General Practitioners. It is probable that she has not been paid her wages; but we can assure her, that her faculties are not keen enough for more active duties. She must continue to dry-nurse the College Regulations. This is the only office that befits her incapable old age.

To return to these Regulations. They provide only for a small section of the older members of the College; but do not regard the *future* necessities of the Profession. The Council, indeed, assume that the regulations are only subsidiary, or, rather, preliminary, to a general measure; but what that general measure is to be we can only imagine from the information afforded us of what it is *not* to be. It is *not* to be liberal, just, or comprehensive; so far we know, and we shall, therefore, wait with impatience to be informed what new iniquity the Council are meditating against the interests of their members and the whole body of the Profession. Stationary they cannot remain, for their receipts are not equal to their expenditure; and they will be driven to attempt some kind of legislation merely to maintain the efficiency of their Institution. The necessities of the College are the hope of the Profession.

The indignation which the Letter from the Council has evoked is displayed in our Report of the Conference at the Hanover-square-rooms, published in another page. The speakers, generally, condemned the illiberal and arrogant conduct of the Council of the College; and we hope that this feeling will spread rapidly throughout the country, and constitute the bond of union between all sincere men who have at heart the honour and interests of their Profession.

SECOND CONFERENCE OF DELEGATES, AT THE HANOVER-SQUARE ROOMS.

A meeting of this body was held on the 19th inst., at the Hanover-square Rooms. Several General Practitioners of respectability and influence were present, both from the Metropolis and the provinces. The Conference was convened to receive the Report of the Deputation to the College, and also the communication addressed to the Council of the National Institute by the Council of the College of Surgeons, in answer to an application made by a Deputation from the last Conference. This letter was published in our pages last week.

N. Clifton, Esq., the Vice-President of the National Institute, was voted to the Chair, and called upon Mr. Ross, the Honorary Secretary, to read the Report of the Deputation.

Mr. Ross read a lengthened Report of the interview between the Deputation and the Council of the College of Surgeons, and also the letter received by the National Institute from the Council of the College.

Mr. Clifton said, in opening the subject for discussion, that the letter just read showed that the College of Surgeons was the sole impediment to a settlement of the Medical Reform question; that it was manifest that they had not been sincere in their professions, and that they had continued the negotiations at the College of Physicians only to gain time, hoping thereby to frustrate the exertions of the General Practitioners. The members of the College have now an additional claim on that body, from their dishonourable conduct and evasion in the last transactions. It was for the Conference to consider what steps they would take in reference to those matters.

Mr. Bottomley said, that he should henceforth contend for an independent College, with full powers; for it was of no use to go again to the College of Surgeons. He, therefore, begged to move:—

"That after the receipt of the letter from te Council of the College of Surgeons now read, it is inexpedient to make any further applications to the Council of that College."

Mr. Septimus Read seconded the resolution.

Mr. Farnham Flower (of Chilcompton,) thought that having opened a negotiation with the College, it might seem more consistent to communicate further in reply to the letter that had been received.

The Chairman explained, that the letter was, in fact, addressed to the Council of the National Institute, and the reply would, therefore, more appropriately come from that body.

The resolution was then put and carried unanimously.

Dr. Webster considered, that the answer of the College was uncourteous, unfriendly, and unjust. The Conference ought to stand up most strenuously for an independent College, and he hoped that the Profession throughout the Kingdom would unite for that object. He commented on the assumption, by the Council, that the College was the sole body for granting diplomas in Surgery. It was not so. In Scotland, at any rate, the Universities had that power; and in England, the University of London, by their Charter, can examine for a Medical degree in Medicine, Surgery, and Pharmacy. He moved—

"That the resolution, empowering the Deputation to wait upon Sir George Grey, passed at the last meeting of the Conference, be acted on, and that a letter be written to Sir George Grey, requesting him to appoint a time to receive the Deputation."

Mr. Bowling, (Hammersmith), seconded the resolution, and suggested, that the title of the College might be a subject for future consideration.

The Chairman thought that it should be one of the first objects of the Deputation to obtain a pledge, that no legislation should be entered on without the representatives of the General Practitioners being received as concurrent parties; that it was more than ever necessary to seek an interview with the Home Secretary, as, during the last week, the Colleges of Physicians and Surgeons had had an interview with him, and it was desirable that their representations, if made in a narrow spirit, should be neutralised. The Home Secretary should be requested to suspend the grant of a new Charter to the College, until the terms of it had been made known, and a general arrangement had been agreed to.

Mr. Ancell said that it was necessary to know the circumstances in which those gentlemen were placedt who represented the Institute. They were acting a present in pursuance of the terms of an arrangemend in which mutual concessions were demanded an given. They were doing so at Sir George Grey's request, but that, notwithstanding they fully concurred with the other parties in the demand for a Charter for an independent College. It might no be possible to get this, and should these arrangements fail, they would feel more at liberty than

ever, and were quite prepared to make the claim for an independent college with redoubled force.

Mr. Bird explained, that Mr. Ancell appeared to understand by the words "independent College," a power to confer the privilege of practising independently of any other Institution, but that the College hitherto sought by the National Institute would be equally independent, although not possessed of those absolute powers, as it would be independent in its internal government, although co-operating with the College of Surgeons in giving the necessary certificates qualifying for a license to practise. They had never swerved from claiming the right of appointing their own curriculum and standard of examination. In other respects it was a scheme of mutual concessions. He stated, that the letter from the Council of the College had been laid before the Conference of the College of Physicians, and that the Delegates from the National Institute had repudiated the interpretation put by the Council of the College on the "Principles for a Bill" that had been agreed to.

It was intimated to the meeting, that the Council of the National Institute had transmitted an answer to the communication from the Council of the College, which will be published on an early opportunity.

A general discussion thereupon ensued, and, after a vote of thanks to the Chairman for his excellent conduct in the chair, the meeting separated.

REVIEWS.

Underwood's Medical Appointment-Book for 1850.

We have much pleasure in recommending to our readers Mr. Underwood's Medical Appointment-Book. Last year the work was very popular, and most liberally supported by the Profession. The volume for this year is no less worthy of patronage; while its usefulness is increased by being published in three different sizes, with and without tucks and pockets, containing test papers and pencils. It has also a Midwifery Register, and many other valuable additions. It contains an almanack for the year; rates of postages, meetings of medical and scientific societies; the London University, Colleges, and Apothecaries' Company; the Medical Men-remunerating Insurance Offices and their officers; directions for making wills, and notices of many other matters of importance and utility to the Profession, from whose patronage we hope much for Mr. Underwood's Medical Appointment-Book.

Practical Observations on the Prevention, Causes, and Treatment of Curvatures of the Spine. By SAMUEL HARE, Surgeon. Third Edition. Pp. 245. London: John Churchill.

Surgeons, who make deformed young ladies and gentlemen the especial objects of their attention, appear to feel bound to present the Profession nominally, the public really, with a book on the subject of curvatures of the spine. It is to the class of productions that owe their origin to some such motive that the work before us belongs. It contains nothing new; nothing told better, or explained more clearly, than it had been times and often before Mr. Hare "took up" the subject.

Twaddle about regimen, common-place remarks on the symptoms and treatment of curvatures of the spine, and cases to illustrate the Author's surgical powers, constitute the book. We expected, ere we opened it, to see horribly distorted backs on one page, for the purpose of showing what objects of pity the patients were when they sought the aid of the spine doctor; and, on the opposite page, well-formed, plump, soncy figures to demonstrate the skill of the same spine doctor, in making the crooked straight. Such pictures are the stock in trade of this genus of writers. But we did not expect to see the idiotic doll, with conical head and shelving forehead, converted into the intellectual youth, with ample front erect, as at page 138, of Mr. Hare's book. Where the heads of young gentlemen are diminished or increased at the will of the artist, Nature having performed no part in the metamorphosis, one just fancies it possible,—just barely possible,—that similar liberties may have been taken by the artist with their spines.

Practical Remarks on Asiatic Cholera. By F. J. MOSGROVE, M.R.C.S., Eng.-Assist.-Surgeon Bombay Army. American Mission Press. Bombay Pp. 43. 1849.

This little pamphlet contains a brief account of the symptoms of Cholera, and of the treatment advocated by the Author. Among the premonitory symptoms, Mr. Mosgrove mentions "a peculiarly strange pricking and throbbing sensation in the hands and feet," which, so far as he has been able to ascertain, has never been noticed by any writer on Cholera, although he thinks it is very common. The remedy his own experience leads him to prefer after the commencement of collapse, is an abundant supply of cold water internally.

The following remarks, which the Author thinks of extreme importance, are novel:—

"The patient should never be allowed to doze for a moment, or even to lie down, until re-action has fairly set in. He should be propped up in bed by a person sitting at his back. Every case of severe cholera should be treated as a person who has been exposed to intense cold, or who is under the influence of an over dose of opium. To allow him to sleep, is to allow him to die."

The Author appears to have had large experience in the treatment of the disease concerning which he writes.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

FEBRUARY 12, 1850.

Dr. ADDISON, President, in the Chair.

CASE OF STRICTURE OF ŒSOPHAGUS, FATAL TWO YEARS AND THREE MONTHS AFTER ACCIDENTALLY SWALLOWING SOAP-LEES.

By W. R. BASHAM, M.D.,
Physician to the Westminster Hospital.

The subject of this case was a woman, aged twenty-two, who was admitted into the Westminster Hospital July 16th, 1847, suffering from the ordinary symptoms of poisoning by a corrosive irritant. Five days previously she had taken by mistake some of the soap-lees used in marble polishing, consisting of a caustic solution of impure carbonate of soda. An œsophagus tube at that time passed readily into the stomach. Under a soothing plan of treatment, with blisters and calomel with opium, she steadily improved, and was discharged, at her own request, ten days after admission. Eleven months afterwards, on June 8th, 1848, she was again admitted, emaciated and weak, and unable to swallow either solids or fluids. The œsophagus being examined by a small gum elastic catheter, (No. 8,) a trifling obstruction was felt at a point corresponding to about an inch below the cricoid cartilage; and about an inch and a half or two inches lower down, another impediment was met with, which it required steady and prolonged pressure to overcome. The catheter was passed into the stomach daily, the size of the instrument being gradually increased. After the first day of this treatment, the patient was able to swallow liquid food, but she could not obtain a passage for any solid portions of food. She increased in flesh and strength, and on June 30th was made an out-patient, but neglected to attend, and on July 18th was re-admitted, with aggravation of the symptoms. A blister was applied, and the catheter again passed with the same good effect as before. At the end of August she was made an out-patient, but remained as a nurse in the Hospital. In January, 1849, she left it. On the 10th of September, 1849, she was admitted for the fourth time. She was now attenuated and exhausted; was quite unable to swallow even fluids, and the stricture could not be passed. She died on the 19th of September. The body being examined, the upper third of the œsophagus was found much dilated, and its coats thickened. Between the first and second stricture the tube was contracted to about the diameter of a No. 8 catheter. The second stricture would not admit a probe from above; it was only from below upwards that a passage could be obtained. The Author noticed the series of symptoms and pathological changes attending the formation of the stricture, and quoted several other examples related by Sir C. Bell, Dr. Cummin, and Mr. Dewar, in which the same were observed. In conclusion, he suggested the propriety of commencing, in such cases, the use of the œsophageal bougie as soon as the inflammatory condition of the parts has been subdued, though no positive symptoms of dysphagia yet present themselves, and of continuing its use daily for months, with the view of preventing the formation of stricture.

Mr. Macilwain commented on the remark made by Dr. Basham, that, in these distressing cases, no other treatment was likely to be successful, than the daily use of the bougie. Cases of stricture of the œsophagus are of unfrequent occurrence, and he (Mr. Macilwain,) should speak cautiously respecting their treatment. His views, however, were very different to those of Dr. Basham. Practitioners, in such cases, relied too much on mechanical measures, and not sufficiently on those of a constitutional character, such as would bring the tube itself into a more healthy state. He (Mr. Macilwain) had seen a great many cases of stricture of the œsophagus, and had observed that but little benefit was derived from the too frequent use of the bougie. Its occasional passage was certainly necessary; but other measures were also required, such as are likely to cause a quiescent condition of the tube and system. Passing a bougie daily is very undesirable in stricture of any canal: once or twice a week is quite as often as it should be done in stricture of the œsophagus. The circumstances which led to the formation of stricture in this case were certainly different from those in which the disease is of constitutional origin; but he did not think that they greatly altered the nature of the case, which essentially followed the same category.

Mr. Lloyd agreed with Mr. Macilwain, that these cases are rare, but many such may be seen during a lifetime at large Institutions, and such had been his experience, the result of which did not correspond with either that of the author or of Mr. Macilwain. He (Mr. Lloyd,) then referred to the cause of the disease, as stated by Dr. Basham,—the swallowing a certain alcali—which, by its irritating and corrosive action on the mucous membrane, caused the stricture. In one case, cited by Dr. Basham, twenty years elapsed before the symptoms of stricture occurred. He (Mr. Lloyd,) could not conceive that after such a considerable lapse of time, the stricture could be fairly referred to that cause. As far as his experience went, no treatment of these strictures was so generally successful as the use of alkalis: if, therefore, they could cause the disease, he could not understand how they could be so useful in relieving it. There was a patient in St. Bartholomew's, about a month ago, who had not been able to swallow solid food for some time previously. There was a decided obstruction about the situation of the cricoid cartilage, so that no instrument could pass; but, after applying the nitrate of silver to the part, and giving the liquor potassæ, in twenty minim doses, three times a day, the bougie could be passed through the stricture. The liquor potassæ was continued in increasing doses; the patient was gradually enabled to take solid food, and ultimately returned to the country quite cured. For many years past it had been his practice to give alkalis,—the liquor potassæ, internally, and to mop the stricture with the undiluted liquor, applied by means of a piece of sponge, fastened to a whalebone stem. He had never seen any harm from this practice, and had been led to adopt it from its beneficial employment in cases of irritable stricture of the urethra, where he had always found its use followed by relief, and the ability to pass a large instrument. He had found it very serviceable in stricture of the œsophagus, except in cases dependent on malignant disease, in which no treatment could be successful. When the stricture was caused by irritation or inflammation, the local and general use of alkalis was the practice most likely to be beneficial.

Dr. Basham observed, that, in drawing up the paper which had just been read, his object was to call attention to the results of accidents from the ingestion of caustic alkalis, rather than to the treatment of irritable stricture of the œsophagus, or of stricture of the œsophagus at all. He would, therefore, only state, that the case of stricture in which twenty years elapsed, after the taking the alkali, before the disease declared itself, was recorded by Sir Charles Bell, who speaks decidedly of its being traceable to the action of the caustic alkali. It is evident, therefore, that a long period of time may, and does, elapse, after the ingestion of the poison, before those changes take place, which cause stricture of the œsophagus, and ultimately death, by the impassible condition of the tube. Dr. Cummin's successful treatment of a case of stricture, similar to that which he had narrated, by the daily use of a bougie for months, was the reason why he had drawn the attention of the Society to these cases. He (Dr. Basham) was of opinion, that that plan of treatment was the only one which would really arrest a fatal termination to the case. He was surprised to hear Mr. Macilwain's objections to it, for such cases could not be cured by constitutional treatment. Without the use of the bougie, patients can only be kept alive by the infiltration of a small quantity of nutritious fluid through the stricture, when it can pass, or else by means of enemata containing nutriment. Mechanical applications are absolutely necessary to cure this disease.

Dr. Black explained the process of formation of a stricture of the œsophagus, after the ingestion of a caustic alkali, as not being the result of the disorganising action of the alkali, but of the subsequent healing process. He had seen six cases of stricture of the œsophagus, one of which resembled Dr. Basham's. The patient was a young woman, eighteen years of age, who, for the purposes of suicide, had swallowed a strong acid, and was taken to the hospital. After the symptoms caused by the acid were subdued, those of stricture set in, and ultimately terminated fatally. When she died, she looked like an old woman of eighty. She had been kept alive for seven weeks by spring water only. The *post-mortem* appearances were the same as in the case before the Society. The only remedy he believed at all likely to be useful in these cases, was that mentioned by Dr. Basham, whose comments on his case he (Dr. Black) considered to be very judicious.

Mr. Lloyd explained, that the remarks he had made were intended to apply to stricture of the œsophagus generally. When the contraction was the result of cicatrisation from injury, dilatation by the bougie was the only remedy that was applicable.

Mr. Solly bore testimony to the utility of bougies in these cases; if properly used, it was a most valuable instrument. Great delicacy was necessary in its employment; in many instances it should be passed daily, or, at least, very frequently.

Mr. Bossey wished to ask Dr. Basham a question relative to the length of time the bougie should remain in contact with the stricture on each occasion.

Dr. Basham replied, that he believed about a minute would be the time for the bougie to remain in the tube. He did not know whether the length of time the bougie was used was mentioned in the narrative of Dr. Cumin's case, but it must be evident that the effect of the mechanical pressure in the treatment of stricture of the œsophagus, could not be the same as in stricture of the urethra, where the instrument could be retained in the passage for a much longer time.

Mr. Lloyd mentioned a case of cut-throat, in which a tube was kept in the œsophagus for three weeks or a month, the patient recovering. Food was admitted through it.

Mr. Macilwain remarked that the observations of Mr. Solly would seem to imply that he (Mr. M.) proscribed the use of the bougie. That was not the case; he wished to draw attention to the necessity for constitutional treatment, and to express his opinion that there were few cases in which the daily passage of a bougie was either necessary or proper. In cases of severe and extensive injury to other canals, the urethra, for example, the daily passage of a bougie would not be found serviceable, while benefit would be derived from its less frequent use.

Dr. Addison referred to a point not hitherto noticed by any of the speakers, namely, the difficulty of diagnosis, and named several diseases for which it had been mistaken, and afterwards alluded to the hysterical variety of the disease, of which he mentioned an instance, describing as one of the symptoms the capability of passing a bougie on the first application to the surgeon, with, perhaps, failure, or occasional success, on subsequent trials.

Mr. Macilwain believed that permanent stricture of the œsophagus may be occasionally aggravated, but he had never seen a case in which a bougie could be passed the first time of trying it, and without previous preparation. If such a case were to occur to him, he should doubt its being an instance of stricture.

Mr. Solly mentioned the case of a poor woman who died recently in St. Thomas's of malignant stricture of the œsophagus. Nine months ago she was admitted as an out-patient, when a bougie was passed, with great relief, and she was not seen again for a fortnight, when the instrument was re-passed. The disease, however, continued to make progress; she was admitted into the hospital, and there died.

Mr. Barlow stated that he had watched the case described by Dr. Basham, and was present at the *post-mortem* examination. He regretted that the discussion had turned on the general treatment of stricture of the œsophagus, which was by no means the desire of the Author, who had been desirous to draw the attention of the Society solely to the consequences of swallowing caustic alcalies. So completely was this his wish, that he had not even mentioned the strong mineral acids as causing the disease. He (Mr. Barlow) then alluded to a case of poisoning by sulphuric acid; the same results were found after death, as in Dr. Basham's case, and in that instance the stricture occurred long after the poison was taken. In Dr. Basham's case, the patient, a strong, healthy-looking woman when admitted, although she could not swallow solid food, yet could take fluids very well. She did her duty, and went about her avocation as a nurse in the hospital; but still she was not safe, as the result showed. Dr. Basham, in recommending the use of the bougie, he (Mr. Barlow) thought, referred to it as a preventive of the formation of a stricture rather than as a means of cure; and this he regarded as a very important feature in his communication. The surgeon, after the symptoms of poisoning have passed away, should use the bougie carefully, and at proper times, during the process of cicatrization, to prevent the occurrence of contraction of the tube. This, he believed, was the practice pursued in Dr. Cummin's case, and it was successful.

A CASE OF STRICTURE OF THE EUSTACHIAN TUBE,

AND THE APPEARANCES PRESENTED ON A POST-MORTEM EXAMINATION; TO WHICH ARE ADDED SOME OBSERVATIONS ON THE USE OF THE OTOSCOPE IN THE DIAGNOSIS OF DISEASES OF THE EAR.

By JOSEPH TOYNBEE, F.R.S., Senior Surgeon to the St. George's and St. James' General Dispensary.

In this paper the author first alluded to the various opinions held by writers on diseases of the ear, as to the causes of obstruction in the Eustachian tubes; he then proceeded to give the particulars of a dissection, in which the source of obstruction was one which has not hitherto been alluded to—viz., a thickening of the bony parietes of the tube. The case was that of a man, aged forty-five, who died from scrofulous disease, and in whom the ear was examined during life, the appearances of which were detailed, and the peculiar effects of stricture of the Eustachian tube on the membrana tympani pointed out. Upon dissection, the internal portion of the Eustachian tube, for the length of half-an-inch, was found to be quite healthy, but about that distance from the tympanic cavity there was a sudden constriction, which, for the length of about a line and a half, was so contracted, that even when the anterior wall of the tube was removed, it was with difficulty that an ordinary-sized bristle could be introduced into the opening. The cause of the stricture was described as being an enlargement of the external and internal osseous walls of the tube. The presence of mucus in the tympanic cavity, in cases of obstruction of the Eustachian tube, was pointed out as an important symptom; and it was remarked, that in those instances where perforation of the membrana tympani (supposed cases of stricture of the Eustachian tube) has been successfully resorted to, it is not mentioned that mucus was found; from which fact, in connexion with others, the Author of the paper is of opinion, that the cause of deafness in such cases consisted in a peculiar disease of the membrana tympani itself, rather than in disease of the Eustachian tube. The concluding part of the paper consisted of observations on the use of the otoscope in the diagnosis of diseases of the ear. This instrument consists of an elastic tube, eighteen inches long, and about half an inch in diameter, each extremity having attached to it a piece of ivory or ebony. One end of this tube being placed in the external meatus of the patient, the other is inserted in that of the surgeon, and by this means sounds emanating from the tympanic cavity of the patient can be distinctly heard by the medical man. The sound produced by the passage of air into the tympanic cavity when the organ of hearing is healthy, consists of a series of very faint cracks, which are distinctly appreciable by the use of the otoscope. The author states it as his opinion, that, as a general rule, when the Eustachian tubes are open, patients can force air into the tympanic cavities by attempting to make a forcible expiration while the mouth and nostrils are closed. Exceptions to this rule are found in children, and in certain adults who cannot be taught to make the necessary forcible expiration. In these cases, recourse must be had to the Eustachian catheter, which being introduced into the Eustachian tube, and another tube, very light and elastic, (the explorer,) being attached to the nozzle, the medical man can blow through it, and distend the tympanic cavity at the same time that he is listening with the otoscope inserted in the meatus externus.

Mr. Harvey inquired of Mr. Toynbee, whether the tonsils were engaged in the disease in this case, and whether he had found their excision of service in cases of deafness arising from obstruction of the Eustachian tube?

Mr. Toynbee, in reply, observed, that when the tonsils became enlarged, it was inwards and not upwards. Deafness was rarely produced by their pressing on the Eustachian tubes; he had lately seen cases in which the tonsils were enlarged to six or seven times their usual bulk, and yet there was little or no attendant deafness; while, on the other hand, deafness might and does exist, without any enlargement of the tonsils. There is generally a space existing between the Eustachian tubes and the tonsils, and when deafness is coincident with enlargement of that gland, it is because the thickening has extended to the membrane lining the tympanum. Excision of the tonsils is, consequently, of very little service in relieving deafness.

Mr. Streeter wished to ask Mr. Toynbee whether there are any means of distinguishing temporary deafness from thickening of the mucous membrane of the throat, from those more serious diseases for which catheterism of the Eustachian tube has been practised? He asked the question, because he believed that attention to the state of the mucous membrane of the throat, in incipient deafness, would enable us to arrest its progress, and prevent its becoming a permanent disease in the orifice of the tube itself.

Mr. Toynbee had made a great number of *post-mortem* examinations of patients deceased from scarlet fever, who were also deaf. In many cases he had found ulceration of the mucous membrane of the throat, and also ulceration of the tympanum and its membrane, but none, in any case, of the Eustachian tubes. He believed, therefore, that the cause of deafness in scarlet fever was not so much a diseased condition of the Eustachian tube, as of the membrane and the cavity of the tympanum, and a collection of mucus in it. With regard to the means of diagnosis, he know nothing better than the use of the speculum-lamp, by the light of which we can ascertain the condition of the membrane, while by the otoscope the state of the cavity and tube can be discovered. Instead of the usual healthy crackling sound, we should have a puffing or bubbling sound, when the cavity is contracted, or contains mucus.

Mr. Harvey inquired into the results of Mr. Toynbee's experience, relative to the application of hydrated pellets of wool in perforations of the tympanal membrane?

Mr. Toynbee replied, that in the majority of instances the application of the cotton did not do any good; in some it caused mischief, while in a very few instances it seemed of benefit. He did not believe

that the advantage derived ever depended on the perforation being covered by the pellet, for in one of the cases, in which it seemed of use, there was not any perforation in the membrane at all. The plan was not a new one; he had known of it for eight or ten years. He was not able to say in what condition of the membrane the application of the pellet would be of service, and he thought it should be used with caution, because the presence of this foreign body may cause considerable cerebral disturbance, and even induce an attack of meningitis. Deafness is not necessarily the result of an aperture in the tympanal membrane.

The meeting then adjourned.

A new form of hernial truss, invented by Mr. Teale, of Leeds, was exhibited to the Fellows of the Society, prior to the adjournment.

The following is the list of papers to be read at the ensuing meetings of the Society:—

On the Proximate Cause of Albuminous Urine and Dropsy, and on the Pathology of the Renal Blood-vessels in Bright's Disease. By George Johnson, M.D., Assistant-Physician to King's College Hospital.

On Fatty Diseases of the Heart. By Richard Quain, M.D., Assistant-Physician to the Hospital for Consumption.

An Account of a Case of Scrofulous Abscess of the Anterior Mediastinum, communicating with both sides of the Chest, the Pericardium, and Trachea, forming a Tumour above the Clavicle, and Simulating Aneurism of the Innominata Artery, or the Arch of the Aorta. By D. Maclachlan, M.D., Physician to the Royal Hospital, Chelsea.

Case in which Hydatids were Expectorated, and one of Suppuration in an Hydatid Cyst of the Liver, communicating with the Lungs. By T. B. Peacock, M.D., Assistant-Physician to St. Thomas's Hospital.

Case of Mollities and Fragilitas Ossium, (Osteo-Malacia Fragilis Rubra,) accompanied with Urine strongly charged with Animal Matter. By W. Macintyre, M.D., Physician to the Westminster General Dispensary.

A Case of Gunshot Wound, and Subsequent Extraction of a Bullet from the Bladder. By E. M. McPherson, Assistant-Surgeon to the 9th Royal Lancers.

Case of very large Hæmatocele of the Spermatic Cord, proving fatal after Ten Years. By W. Bowman, F.R.S., Surgeon to King's College Hospital; to which is added, a Case of very large Hæmatocele of the Tunica Vaginalis in an Old Man, terminating fatally. By T. R. Curling, Esq., Surgeon to the London Hospital.

WESTMINSTER MEDICAL SOCIETY.

FEBRUARY 16, 1850.

F. HIRD, Esq., President, in the Chair.

MISCARRIAGE: REMOVAL OF THE OVUM UNDER THE INFLUENCE OF CHLOROFORM.

Mr. J. B. Brown related the case of a lady, the mother of seven children, who had flooded very much in three of her confinements, notwithstanding every care. She fell down in the sixth month of her last pregnancy, and had signs of miscarriage a few days after. Mr. Brown was sent for, and found her flooding, the ovum protruding through the cervix of the uterus. He gave secale cornutum, and applied ice, and wished to remove the ovum under the influence of chloroform, but the patient refused. At night, violent hæmorrhage came on, and he found her pulseless; he used ice, &c., as before, and, having gained her consent, gave chloroform. The os uteri was relaxed immediately; he scooped out the ovum easily, and had her placed in bed before she awoke. There has been no hæmorrhage since.

Dr. Tyler Smith and Dr. Cormack both bore testimony to the sufficiency of turpentine enemata, in such cases, to promote the expulsion of the ovum.

ADJOURNED DISCUSSION.

Mr. Haynes Walton considered the danger in fistulous sores rather to depend on the probable extension of the disease into the prostate. In Hospitals, the catheter is often passed for a long time uselessly; therefore, after a fair trial, if a cure be not effected, the operation should be performed. It is a difficult operation, from the natural condition of the parts being much altered. It is not, however, more dangerous than lithotomy. The operation of cutting is advisable, where a catheter can be introduced, if the stricture be undilateable. He desired to hear Mr. Wade's opinion upon these cases.

Mr. Childs could find but little to say after Mr. H. Smith's excellent paper. The operation of cutting open the urethra should not be undertaken until all other means fail. The cases brought to surgeons have usually been badly treated. The operation is advisable in two classes of strictures,—the cartilaginous, and in extravasation of urine by rupture or ulceration at the strictured part.

Sir B. Brodie disapproved of cutting generally, but proposed a subcutaneous division (by Stafford's stilette?) He considered that many of Mr. Syme's cases would have yielded to the use of caustic. He preferred the subcutaneous operation to Mr. Syme's, and observed, that he was the first to divide the muscles of the back in distortion. He uses caustic three or four times a week, and never experienced bad effects from its application. John Hunter was not the first to recommend caustic, but Mr. Wiseman, in Charles the Second's reign. Whateley did not use it in impermeable strictures, but only where a bougie could enter. Mr. Wade was the first to use it in impermeable cases. He had never found ill effects from the use of nitrate of silver. He then related a case in which nitrate of silver had been used by him in a case of pyelitis with impermeable stricture. After four or five applications of the caustic, a No. 12 bougie had been passed. In answer to a question, he replied, that the subcutaneous method of cutting is by passing a grooved director down to the stricture, introducing a knife into it, and, at the proper time, turning it round, and dividing the part against which it comes.

Mr. Wade considered the perineal section as very serious, and sometimes fatal. Sometimes it does not produce a continuous cure, as, after about two years, the parts will often contract as previously, and require the passing of bougies. He had the authority of Mr. Aston Key in recommending the caustic treatment in a case of impermeable stricture, where he advised the patient to recruit his health in the country, and then return to Mr. Wade to be treated. The cutting operation should never be performed, save to relieve a patient from immediate danger. If a stricture can be passed by a catheter it may be left in with propriety. He held the doctrine of Mr. Syme to be very dangerous; many strictures are with difficulty passed, so that the operation is likely to be very frequent; of two plans we should always choose the less dangerous, and never undertake the cutting till the caustic has been tried. He now never uses the nitrate of silver, as the potassa fusa allays irritation, besides doing good otherways. He recommended the caustic to be used in very small quantities, and that there should be no hurry in urging the cure. He does not use the potassa fusa in sufficient amount to cause a slough. (After the meeting Mr. Wade showed how he uses the caustic on the point of a bougie.)

Dr. Knox, of Edinburgh, said: That surgeons abroad, especially at Hamburgh, use caustic freely in strictures and in gonorrhœa—its employment, therefore, is not so objectionable as has been supposed. Sir E. Home made great parade of his operations, but his great tact and skill enabled him to distinguish those cases which would be amenable to the treatment, and hence he did not use caustic so often, as under other circumstances he might have done. Dr. Knox preferred small silver catheters to bougies; by their use a good anatomist can avoid false passages, which the bougie is likely to enter or make. He agreed with Mr. Syme that no stricture is strictly impermeable, as mucous passages never entirely close. It is necessary to be on one's guard in accepting the published statements of surgeons, as the cases are frequently too recent for the cure to be depended upon; and he instanced the case of a surgeon, who published the first five cases of lithotomy he operated on, as all being successful; but one of these five cases died very soon after, as did also the seven cases subsequently operated upon.

Mr. Acton observed, that either cutting into the urethra, or using caustic, is very seldom required, and sufficient time has not yet elapsed to prove the real advantage of either. M. Ricord and others considered potassa fusa a dangerous caustic, and in applying it to the cervix uteri, great difficulty is found by practitioners in preventing its effects spreading to other contiguous parts. Oil on potassa fusa prevents its action: its effect on the stricture in the urethra may therefore be very slight, or none at all.

Mr. H. Smith having replied, Dr. Manson occupied the few remaining minutes by exhibiting a contentrated aqueous solution of senega, made by Mr. Baxter, of Islington, ʒj. in ʒj. of water: making a solution stronger than the decoction of the pharmacopeia; and one the strength of which is known. He added, that it may be used in chronic bronchitis with profuse frothy expectoration.

Messrs. Childs and Bailey spoke to its use in the diseases of children, and in diarrhœa.

ELECTION OF OFFICERS.

The scrutineers having presented their report of the ballot, the President announced the election of the following gentlemen as officers for the year ensuing:—

PRESIDENT.

E. W. Murphy, M.D.

VICE-PRESIDENTS.

E. Lankester, M.D., F.R.S.	A. B. Garrod, M.D.
J. F. Marson, Esq.	J. F. Clarke, Esq.

COUNCIL.

W. Harding, Esq.	F. Hird, Esq.
F. R. Manson, M.D.	F. Sibson, M.D., F.R.S.
T. H. Tanner, M.D.	B. Travers, Esq., Jun.
W. R. Rogers, M.D.	J. R. Cormack, M.D.
W. Harvey, Esq.	R. Greenhalgh, Esq.

Note.—The *first* column of Vice-Presidents and Council contains the names of those who continue for the second year of office, and were not elected at this meeting. Dr. W. Merriman and Dr. Routh, the Secretaries, are appointed by the Council.

Dr. Murphy having taken the chair, a vote of thanks was given by acclamation to Mr. Hird for his conduct as President during his period of office.

CORRESPONDENCE.

ABERDEEN DEGREES.

[To the Editor of the Medical Times.]

SIR,—Will you permit me to say a few words in defence of the Aberdeen degrees of M.D., in reply to your Correspondent "Mors?"

It is but fair, that those who have some practical knowledge of the nature of the ordeal through which candidates for the M.D. degree have to pass, should be heard on the subject. The letter of "Mors" is calculated to do much mischief to the character and reputation of the University, and to deceive those who contemplate graduating there as doctors of medicine. If Medical men are led to suppose that parties offering themselves for examination at King's College University, Aberdeen, are not subjected to a testing examination, many incompetent men might be induced to present themselves before the Board with the certainty of rejection; thus great expense would be incurred, and mortification follow. For this fact I can truly vouch,—*that no ignorant, ill-informed, or incompetent man can pass the examination at Aberdeen.* The candidates are expected to be thoroughly, practically, and theoretically acquainted with every department of the Science of Medicine. The examination generally lasts for an hour, and is *vive voce* in character. Occasionally the candidates are examined on two separate occasions. They are expected to be well acquainted with anatomy—microscopic, general, and relative. He is also examined minutely in physiology, pathology, chemistry, surgery, and pharmacy. He is also required to write a Latin prescription in full. I defy any man not well up in all the modern views as to the treatment of diseases, chemistry, physiology, pharmacy, and surgery, to pass the examination. On the strength of the assertions made by your Correspondent, many Medical men possessing the minimum amount of knowledge, and without proper preliminary preparation, might flatter themselves with the idea, that they have only to jump into a railway carriage, start for Aberdeen, and, having the requisite amount of

money in their pockets to pay for the Diploma, present themselves before the Board, and obtain, as a matter of course, the honour of being dubbed "Doctor of Medicine." This has been tried and has failed. To the honour of the University, let it be generally known, that they do not confer the degree of M.D. on any man who is not possessed of a high amount of medical knowledge. Who are the examiners? Dr. Redfern is the examiner in anatomy and physiology. No person acquainted with the Professor's attainments will question his profound knowledge of both sciences. Dr. Redfern is inferior to no living anatomist. He has cultivated with great zeal microscopic anatomy. I pity the man, not acquainted with minute anatomy and physiology, who subjects himself voluntarily to Dr. Redfern's examination. Dr. Kilgour examines in the practice of medicine, and is most particular in ascertaining the amount of practical knowledge possessed by the candidate. Dr. Kilgour is a most able pathologist. Witness his valuable pathological museum at Aberdeen, the result of his own talent and industry. Nearly all the candidates are minutely examined in the *stethoscopic* signs of diseases of the heart and lungs. Dr. Fyfe, the son of the eminent anatomist of that name, examines minutely in chemistry, and Dr. Keith in surgery. On the day when I was examined, several gentlemen were expected to have a knowledge of Liebeg's new chemical views, and were questioned on the point, and the physiological examiner tested the candidate's knowledge of Dr. M. Hall's views of reflex action. Candidates were also closely examined as to the various decompositions, and the preparation of morphia, and the chemical changes which take place in preparing this drug.

I mention these *facts*, with the view of establishing, that the examination for the M.D. degree at Aberdeen is no trifling and insignificant affair, as your correspondent would lead the readers of his letter to suppose. The man who passes that examination need not fear presenting himself before any Medical Board in the United Kingdom. I enclose you my card.

I remain, your obedient servant,
M.D. OF KING'S COLLEGE, ABERDEEN.

London, Feb. 12.

[To the Editor of the Medical Times.]

SIR,—Though perfectly sure that the numerous and intelligent graduates of Aberdeen will not permit the remarks on their Diploma by your Correspondent of this week, to pass unanswered; yet, as the gentleman has particularly referred to me, I feel that I must again claim your indulgence.

Mr. "Mors," of Rollensloch,—(what a signature for a man to choose; and what an address to give! How morbid the taste which could make such a selection. Is "*Mors*" so familiar with the gentleman? Is it so close an attendant on his footsteps, that he could not even write a letter without making it his motto?—I should not like to be a patient of Mr. "Mors," of Rollensloch)—has made a statement, respecting a gentleman who obtained a Diploma in a very ready manner at Aberdeen. I cannot, of course, contradict him, but I have no doubt but you will receive a flat denial to his story from some of the Professors of that University. But here we have again dished up for us the story of the surgeon or surgeons tapping the pregnant woman for dropsy. Now, the mistake is made by two Aberdonians. I honestly tell Mr. "Mors," I do not believe this tale of his. Why, Sir, the story is as old as the hills. I never heard a lecture delivered by the Professors of Midwifery and Surgery on Dropsy, that I did not hear of the mistake being made by some nameless country Practitioner. Perhaps Mr. "Mors" would enlighten us in his edition, as to the result of the case. I remember, in half a dozen instances, the women died, and, in one instance, the woman was saved merely by the lecturer being called in in the nick of time, which made me look upon him as a very clever man; and it being some fifteen years ago, and my first course of lectures, make an inward determination to consult him in all doubtful cases of dropsy, &c. Certainly Mr. "Mors" deserves some credit for originality; for his case turned out one of twins!! I wonder if "Mors" was ever rejected at Aberdeen. Two gentlemen went to Aberdeen from London, for the purpose of graduating. I met one of them a short time after his return, asked him how he got on there, and hoped I had the honour of addressing him as Doctor. "No, you have not," was the reply. "The truth is, when I saw the poor place Aberdeen was, and how insignificant King's College looked, I saw there could be no honour in being connected with it; so I took a trip into the country, and saved my money." Now, he is one of those men who have got on by sheer impudence alone. A short time after, in society, I met the other, a man of a different stamp,—an industrious, pains-taking, self-denying man, of considerable ability, who has succeeded in life beyond his own expectation. I was told that he had passed at Aberdeen, and made the inquiry as to whether he met my friend who had been and saved his money. "Oh, yes, he had seen him there; he had been examined for two hours and a half, and been rejected." I wonder if Mors thinks that King's College looks too insignificant. I should like to know which of those Aberdonians is driving "grim Death" out of his practice and his senses. Do you perceive how nicely he has introduced his strictures on Aberdeen, under the head of medical reform. You will wonder, perhaps, why I am such an advocate for Aberdeen; I answer, because I admire them for what this man censures them; I mean their liberality. They care not where a man has obtained his knowledge, provided he possesses it. In possessing a Diploma of a Royal College of Surgeons, they know that he has undergone a certain course of study; in requiring five years' practice, they insure practical experience in addition to theory. I want to know what good can result from a residence in Aberdeen, which he cannot gain in London, or any other large town. It is ridiculous thus endeavouring to throw useless obstacles in the path of rising men, who, by the neglect of parents or guardians, or straitened circumstances, were unable in their youth to obtain a University education, who have worked hard, read much, desirous for honourable preferment. Are those the men you would wish to see shut out from the honours of the Profession? Are they not, rather, the persons you would wish to see enjoy them? Yet how evidently it is this man's object and wish, in the precious epistle he has penned to you,—an object which I hope you will now, and particularly hereafter, when an attempt may be made by other and more powerful people to carry it into effect, oppose with all the might of your truly clever pen.

I remain, Sir, your obedient servant,
M.D. London, M.R.C.S.

London, Feb. 11, 1849.

REFUSAL TO EXAMINE MEDICAL WITNESSES ON INQUESTS, TO AVOID THE PAYMENT OF FEES.

[To the Editor of the Medical Times.]

SIR,—Some weeks have now passed away since, in the darkness of evening, a man bespattered with mud, and apparently lifeless, was brought to my surgery in the arms of several policemen, who stated that he fell down suddenly in the street. I rendered him the most prompt medical assistance in my power. The man died in about ten or fifteen minutes. The deceased (a poor man) was several hours in my surgery, during which time my house was inundated with policemen and many others. In due time an inquest was held by Mr. Payne, who did not summon me, and, therefore, dispensed with my evidence. During the inquiry, on a policeman stating, in evidence, that I bled the deceased, one or more of the jurors expressed a wish that the medical man should be examined. This wish was argued by Mr. Payne as unnecessary, resting his argument mainly on "*That doctors were like lawyers, they wanted a job.*"

I need not (it is alien to the purpose of this letter) stop to refute this calumnious aspersion of Mr. Payne on the doctors; but, as Mr. Payne is a scion of the law, and, therefore, knows "*the secrets of the prison-house,*" the teaching of which, according to a celebrated writer, "contracts the understanding, and corrupts the heart," I admit his unquestionable authority on the character of lawyers,—nay more, (not forgetting that there are some few and brilliant exceptions, like the oasis in the wilderness,) I can, from bitter experience, bear my testimony, if any testimony were required to such unmistakeable authority, to the truth of his character of lawyers.

Pardon this digression: I proceed. In the summer of last year, a man went or was taken into a chemist and druggist's in Tower-street, and died suddenly. The medical man who saw the deceased was summoned on the inquest, and received his fee.

Now, I ask Mr. Payne, through this public channel, what was there in the one case requiring medical testimony, that was not in the other? I ask him here, in the face of the public, did the motive which influenced him to dispense with my evidence—without which, I suspect, the inquiry was "a lawyer's job," a mockery—originate in a laudable desire not to waste unnecessarily the public money? or did it, to the immolation of every other consideration, in order to deprive me of the guinea to which I should be entitled on examination, emanate from personal hostility, and the indulgence of petty revenge, the offsprings of political rancour and disappointed ambition?

I pass from this to another instance:—On Tuesday last, the 29th day of January, a messenger came to my house, desiring me to hasten to Mr. ——, No. —, King William-street, who was dying or dead. I reached the spot with all possible speed, and found Mr. —— dead in the bed, under the bed-clothes. His wife and daughter said he must have poisoned himself; upon which I made a most careful examination, to discover if any vessel could be found from which he imbibed the fatal draught, in the event of poison being the cause of death. No such vessel or bottle could be found. At length his daughter took from the pocket of a coat, which lay on the chair, about eight feet from the bed, an ounce bottle, carefully enveloped in white paper. This bottle was handed to me, and has not yet left my possession. It is labelled thus, in print:—"Poison. Shuttleworth and Stamper, Chemists and Druggists, No. 140, Leadenhall-street, London, opposite the India-house;" and in manuscript, "Essential Oil of Almonds, 1 oz." There remains in the bottle thirty drops of this deleterious fluid, which appears to be very powerful. The beadle of the parish called upon me in the afternoon, took my name and address, and inquired if I were a member of the College of Surgeons, as he said that was a matter which would be of importance to tell the Coroner.

The inquest was held by Mr. Payne, who did not summon me. He neither required, for the elucidation of the case, or the furtherance of the ends of truth and justice, the bottle, nor Mr. Maybury's testimony! Some few hours preceding the inquiry, Mr. Payne sent the beadle to a surgeon residing next door to the deceased, to say that the inquest was to be held at such a place, and at such an hour. This surgeon, with whom I am on friendly terms, never attended the deceased, (if I except a little medicine prescribed by him some two years ago,) and knew nothing about the matter, save the information obtained by him several hours after my departure, and save that which he learned in a conversation with me previous to the inquest. This surgeon attended the inquest solely from feelings of kindness to the family of the deceased, and was surprised that I was not in the room. Mr. Payne called him, and for his testimony the guinea was paid. I am informed, that the chemist and druggist swore positively to his having sold to the deceased only thirty drops of the essential oil of almonds, and that two drops of it would kill a man! How does it, therefore, happen, that "1 oz." is written on the label? And if two drops would kill a man,—and if that man swallowed one ounce minus thirty drops,—how could he be where I found him?—and how could the bottle be where it was found?

It is not, in any respect whatever, any part of my object, in this letter, to attempt to reconcile contradictions, or to give those explanations which I alone, and not the Medical man who was examined, was competent to give, and which the solemn responsibility of an oath would render it obligatory upon me to give.

I have stated sufficient to demonstrate, beyond the possibility of subversion even by a legal quibble, that the cause of *justice*, of *truth*, and respect for his Court were mere secondary considerations to Mr. Payne, provided he could luxuriate in the spirit of vindictiveness, by wounding me with the poisoned arrow of insult and injustice.

This insult and injustice are the more inexcusable by reason of their being unmerited, on my part, by any act or deed. But whether merited or not, on public grounds, and in humble vindication of a principle of justice, dear to every member of the Medical Profession, I submit that malignity ought not to be permitted to dishonour the Coroner's Court, by coiling itself around the ermined robe of the judgment-seat.

I remain your most obedient Servant,
WILLIAM AUGUSTUS MAYBURY,
M.R.C.S. Lond.; and L.A.C. Lond.

3, Little Tower-street, Feb. 5, 1850.

SALINE TREATMENT OF CHOLERA.

[To the Editor of the Medical Times.]

SIR,—According to the custom of provincial practitioners on Saturday mornings, I yesterday hastily glanced over the medical bill-of-fare on the covers of the weekly journals; and on that of the *Medical Times* I read with pleasure, among your "Original Contributions," "Observations on the recent Epidemic Cholera, by G. Ross, Esq." I quickly opened the paper, expecting, from one who has published and practised so much on

cholera, to glean some valuable facts on this all-important subject. I read and re-read his observations with all due patience. At length I said, Can this be possible? Can it be, that this is the tabular Mr. Ross of 1848?—he who, in his Lectures, condemned the saline treatment of cholera of Dr. Stevens as the worst method possible, and, in the same 3rd Table, praised the saline treatment of Dr. Marsden, at Greville-street Hospital, as the best possible, and the two modes of treatment being actually the same!! According to this Table of Mr. Ross, Dr. Marsden only lost 14 per cent., whilst Dr. Stevens's treatment was attended by a mortallty of 76 per cent. In other places, in Mr. Ross's 5th Lecture, Dr. Stevens's plan was said to be attended by a mortality of 88 per cent., and *Dr. Marsden's salines* by only 8 per cent.; and Mr. Ross also added, that he then found an almost universal opinion in favour of Dr. Marsden's salines with cold water. He subsequently said, that the saline treatment was the best method of cure possible. Will it be believed, then, the same Mr. Ross, in 1850, states, that he has now tried the saline plan of his esteemed friend Dr. Stevens, but found it inferior to his own saline form with nitrate of silver, when, in reality, it appears, he neither used the plan of Dr. Stevens nor that of Dr. Marsden, but his own prescription, *aided* by other remedies. He has not, it seems, been lately at Greville-street Hospital, to learn there the results of the saline treatment in 1849. For the sake, then, of his "excellent friend," Dr. Stevens, he *uses* his treatment, excepting that he omits the recipe of Dr. Stevens,—like the country manager who got up the tragedy of "The Prince of Denmark," only he omitted the character of *Hamlet*. Out of kindness to his patients, he did not, it appears, give them the salines of Stevens, for these contained too much salt; and, therefore, he "saved the bacon" of the sick by curing them with saltpetre; and this mild curing powder was given "throughout the whole period of the epidemic." Nevertheless, he found the majority of his early patients die, after being *helped* over the collapse by his own salines, from the consecutive fever. Yet, according to his own words, he could perceive no probable benefit from the use of salines. He did expect the salts would have excited the kidneys,—as well might he expect to obtain vesicles from blistering a wooden leg, as to expect a "chemico-physiological" sign of returning life before the natural vital powers were sufficiently restored from temporary death in collapse. It then appeared necessary to Mr. Ross to employ other restraining remedies over the stage of collapse, as the saline treatment was most frequently followed by death, though the salt did help the cases over the collapse stage. But it appears by his statement, that "other gentlemen have declared to a different experience."

Poor Steven's! how art thou overlaid by thy nurses, and cuddled to death by thy friends! "Save me from my friends!" Yet some kind soul did suggest, that perhaps the employment of *other remedies* interfered with the action of Mr. Ross's salines, though he says they were "not practical men." So Mr. Ross does not at last believe that the blood can be supplied with the lost salines through absorption, although he must have witnessed the fact in patients who have had enemata given to them, consisting of gruel and salt, by the thirst they complained of afterwards, and the salt taste they experienced generally for some hours. Now, if he had tested the urine in such persons for salt, he would have been soon undeceived. Mr. Ross appears to esteem the restoration of the renal secretion his sheet anchor in cholera, although he permits himself to give opium largely to cholera patients,—a medicine well known to arrest this secretion as well as others, and to paralyse the visceral functions generally. The poison retained in the system was probably the sole cause of the consecutive fever and subsequent death. Then comes his new discovery of the nitrate of silver in cholera; one, two, or three grains administered every hour *with salines*,(a) and he trusts, in future, that this drug may become largely employed in this disease. He speaks most favourably of the beef-tea injections, and, like his predecessor and friend, considers it a most valuable nutrient adjunct.

For the sake of your space, I will not quote more from Mr. Ross's Paper. I will only suggest the inferences which must be drawn by those of our Profession who have read his contribution.

INFERENCES.

1. That Mr. Ross tried Dr. Stevens's plan of treatment in cholera, and found it of little use; although he admits he never used Dr. Stevens's salines *alone*, nor even his own form, without its being *aided* by other remedies, *fearing* the saline plan was incompetent.

2. That the majority of his cases died from consecutive fever, though "the salines helped them over the stage of collapse;" still he saw no benefit from their use.

3. He used more active remedies, at length, to arrest the disease; yet he has given no opinion at all of the nature or cause of the disease itself; and, hence, the administration of active or inactive remedies did nothing to unfold its nature.

4. He has no "confidence in the powers of salines to arrest this terrible disease," though he constantly gave them, and he proved in his published Tables that Dr. Marsden cured *by their means* more cases than any other practitioner. He also admitted the truthfulness of the Tables, open now to the public at the Cold-bath-fields Prison, and verified by the Governor there, and the Visiting Magistrates, in 1832.

5. His avowed object in giving salines was, to resupply the blood with its *lost principles*, and to bring it by their aid, into its normal state. This principle he abandoned, and then appears to have trusted to no principle at all, although he must have been aware of the rapid change in collapsed cases where salines were injected into the blood itself; and knowing that opium arrests all secretions, he gave six grains within the first hour, and one, two, or three grains of nitrate of silver with it to arrest the diarrhœa—one symptom of the disease.

6. That nitrate of silver exerts more curative powers in cholera than any other medicine.

7. Ice stops the cramps of cholera more effectually than anything else.

8. Calomel neither does good nor harm; therefore it must be useless; and so Dr. Ayre's heels are tripped up by Mr. Ross.

9. No one remedy can be relied on as bearing on the essence of the disease, or nature of cholera; hence its essence must be a compound.

10. The wet sheet (cold, I presume) proves useful in incipient collapse, but is of no service in deep collapse.

11. Opium in full doses, in the premonitory stage of the disease, is beneficial, but it wholly fails when the purging is profuse and collapse setting in, and if then given in large doses, is highly dangerous: nothing then does good but nitrate of silver.

12. His future plan of treatment will be, first to give opium and vegetable astringents, and to use the cold wet sheet; then, if purging supervene, nitrate of silver and the steady exhibition of salines (*these two incompatible*) with solid ice and beef-tea injections.

13. The difficulties he had in practice made him abandon the tabular form of estimating different treatments. One-half died of all his collapse cases, and by publishing his own opinions he does not wish to increase the embarrassments in the way of his Profession coming to a just conclusion as to the proper method to treat this fatal disease. Surely it would have been easier for Mr. Ross to do this by not publishing at all.

I shall now conclude by asking you, Mr. Editor, as well as your readers generally, what benefit they have derived from Mr. Ross's observations? whether you or they have derived one clear idea of physiology, pathology, or therapeutics from his contribution? Yet Mr. Ross, no doubt, means kindly to all his friends. He has ever appeared to me to be a most active, candid, and useful officer in the army of truth against the old enemies, prejudice and falsehood; but his zeal in the good cause has pushed him into the enemy's camp. He has not reflected on the first principles of animal life, viz., that black carbonized blood, or blood deprived of its salines, cannot maintain the muscular contractions of the heart, and hence a loss of vitality in all the visceral functions; that all fevers induce this state of blood, which becomes then poisonous to the vital nerves. Well proved as this is, surely, then, the first thing to do is to maintain the *primum mobile* by supplying *the salts of the blood*, which are so rapidly carried out of the body by vomiting, and especially by purging, in cholera. Now, Sir, I am truly most unwilling again to enter the field of controversy on this subject, feeling persuaded that no good will be effected in multiplying words on this matter, before our Profession learns something further on the *modus agendi* of poisonous miasmata, and the vital law of the animal body; till physiologists prove for themselves that common salt is an antidote to prussic acid and morphia,—that it is able instantly to change the nature of venous into arterial blood—that carbonized blood can kill the heart, and salt and water can make it beat again even when removed from the body for many hours. And for these truths we are indebted to Dr. Stevens.

As a constant reader of your Journal, and, as I have been a writer and a practitioner in cholera, I conceived it to be an incumbent duty on me to guard your subscribers from being misled by such an authority as Mr. Ross, who, unintentionally, makes "confusion worse confounded," and obscures the first clear rays we have received from "Stevens's Book on the Blood," and which have been acknowledged as such by some of the first physiologists and chemists here and in Europe. My present intention is, to answer no reply to this letter, contenting myself with showing, that Mr. Ross's present imperfect views of the treatment of cholera, which his experience has sanctioned, and his reason confirmed, throw no light on this dark subject.

I have the pleasure to remain,
Yours very truly,
H. TURLEY, M.D.

Ivy-house, Worcester, Jan. 27, 1850.

P.S. I am desirous to add, that neither Dr. Stevens nor any other friend, has anything to do with the above remarks, and that I am alone responsible for all their faults and imperfections.—H. T.

(a) See "Nitrate of Silver" in "Thompson's Conspectus."

DR. JENNER ON TYPHUS.

[To the Editor of the Medical Times.]

SIR,—The following case may serve as an illustration of what I advanced in a former comunication to this Journal, regarding inflammation of the cerebral membranes as an occasional complication of typhus fever.

Wm. F——, a labourer, aged 24, and married, came under my notice September 1, 1847. Six days previously, having been exposed to contagion, he had become affected with the ordinary symptoms which mark the ingress of typhus, and, at the above date, he presented the usual characters of that period of the disease, without any indications of peculiar gravity in the case. The rash was copious.

His head was shaved. He had a warm bath, with proper precautions against cold, a laxative was administered,—his bowels being rather constipated.

Up till the eleventh day of the fever, he seemed to go on so well that no special note was taken of the case till that morning, when he was observed moaning, and apparently unable to move in bed, while he could not be roused to intelligence by any means. A blister was at once applied over the head, and mercurials were ordered for him, but without benefit. In the middle of the day, all the symptoms taken together, left no doubt of the state of matters within the head. There was hemiplegia and occasional convulsive movements of the muscles of the eyeballs. His pulse was very weak, and the respiration becoming gradually more oppressed, he died in the evening, just about twelve hours after these adventitious symptoms had been observed.

An inspection was made eighteen hours after death, and the substance of the notes in regard to the head follows:—The dura mater, particularly over the left hemisphere, was more than usually vascular. A very large quantity of dark blood issued from the longitudinal sinus on laying it open. On removing the dura mater, a layer of light-brown granular-looking fluid, mixed with shreds of lymph, was seen on the arachnoid coat, over the centre of the left hemisphere of the brain. There was, also, very abundant, reddish serous effusions beneath the arachnoid, and in both lateral ventricles; and the substance of the brain presented in sections apparently more numerous vascular points than in its healthy state.

At the time of inspection, the peculiar typhus rash was still persistent.

This is a good example of what I desired to bring before you; but it is peculiar in one respect, in so far as the accession of the head disease was not well marked. To judge, however, from the few remaining instances of this complication which I have observed, the occurrence of meningeal inflammation in the course of typhus, may, in general, be determined, from a close examination of the whole of the symptoms present. But it is, perhaps, impossible to point out any number which could warrant more than a suspicion of such an event. This may seem a strange statement, yet it will be admitted by those who have paid much attention to the subject; and those who have not done so, if yet they have seen many patients in the later stages of typhus, will, perhaps, admit it too. It is the observation of cases of violent delirium, and of deep coma, and *post-mortem* examination of these the most promising cases for discovery,—while the numerous examples of death

from mere prostration are left unexamined—that have led to the notion of the inflammatory nature of typhus fever.

Regard to the valuable space on which I am encroaching has prevented me giving the foregoing case at greater length; and for the same reason it is I do not submit to you some notes on other cases of the same nature.

I am, &c.,
JAMES STEVEN, M.D.

Glasgow, February, 1850.

PRIVATE ASYLUMS.

[To the Editor of the Medical Times.]

SIR,—The case with which you have illustrated the Article on the law of lunacy is not one bit overdrawn. An instance of precisely similar character, but accompanied by worse features, has recently come under my own personal knowledge; the particulars of which, if we can properly do so, we will furnish you with.

In order to show the gross and fearful abuses that are perpetrated in private lunatic asylums, I should like you to see two affidavits of *Thomas Marks and his wife*, which, some time since, we prepared and sent to Mr. Bolden, Solicitor, of 44, Craven-street, Strand, in a case which was then before the Lord Chancellor.

Mr. Bolden, on using the names of my firm, "Stanley and Wasbrough," would lend it to you most willingly.

In this case, both certificates and order appear *to be quite regular*, although one of them was *not* given for some hours after Marks was taken to the Asylum. And I have not the slightest doubt, that the treatment he experienced, after he was taken there, was, that he might be in *a proper state* for the second surgeon to see him.

Yours, faithfully,
HENRY S. WASBROUGH.

Bristol, Feb. 18, 1850.

"STUDENS" AND INFIDELITY.

[To the Editor of the Medical Times.]

SIR,—Your answers to this inquiring youth, who seems to be hovering on the brink of that horrible abyss into which the erudite but unfortunate Voltaire sunk and wallowed, are truly Christian and excellent, and, so long as the Editor of a leading Medical Journal continues to give such advice to erring youths entering our Profession, I confess that I have no fears whatever of our studies tending towards infidelity. Common sympathy for the present and eternal welfare of this youth alone prompts me to crave a space in your columns to give a kindly word of advice to "Studens." I fear much that he is one of that, alas! too numerous class, whose youthful mind has not been instructed in the principles of Christianity, and who, in after years, has made little if any use of either his Bible or prayer. Parents who commit such youths to mingle in the giddy and destructive whirlpool of London follies, temptations, and vices, have a serious responsibility resting upon them! How many young men, fresh and innocent from their country hearths, have been wrecked and ruined by the seductive nature of its allurements, for the want of wholesome paternal *surveillance?*

This much premised, I shall now allow Science, who is the handmaid of religion, to conduct "Studens" to the summit of some lofty elevation in the country, on a beautiful summer's day, when the air is limpid—pregnant with the perfume of ten thousand odours, and filled with the warblings of the feathered songsters. Here let "Studens" gaze on the gorgeous panorama, extended widely before him for miles and miles. "Studens" is enraptured with the scene, and Science addresses him thus:—

"The scene, oh, young man, is sublime and grand in all its parts, and is fully calculated to display the hand of an omniscient and omnipotent God; but in *thy eye*, oh, youth! there is a far more grand manifestation of the being of a God. Lift up thy eyes again and survey the prospect before you. You see the plain extending far and wide, undulating here into the lovely valley, and rising yonder into the noble hill, studded with villages, woods, and farmsteads. At the bottom of this elevation is a town; you perceive its shipping lying upon the bosom of its placid waters, and the din of its busy traffic grates upon thy ears. Now, oh, youth! all this magnificent landscape is minutely depicted upon the retina of thy eye, by the exquisite and beautiful adaptation of that noble camera-obscura, placed there by the *designing* finger of that Omnipotent Being who framed and called into existence thou and the panorama before thee; and, though the retina of thy eye does not exceed the size of a *shilling*, yon church towers which are overtopping the hills and woods, or overlooking the villages, the farmers and labourers at their work, the sheep and other cattle reposing under the shade, and even yon coach, which thou seeth far in the distance, laden with passengers and luggage, together with the whole extensive tract of country before thee, are *all* vividly portrayed upon it. Well might "Studens" now exclaim with the Psalmist, when he was meditating upon the works, majesty, and power of Jehovah, "O Lord, how manifold are thy works; *in wisdom* hast thou made them all; the earth is full of thy riches;" or, with the poet Addison,—

"'There is,' all nature cries aloud
Through all her works."

Let "Studens" procure a bullock's eye, and dissect it very carefully, and examine minutely the beautiful harmony and arrangement of all its parts for producing vision, and then let him ask himself, can this be the effect of *chance?* Or will he say that the bee, in the construction of its hive, has been carrying into effect, from time immemorial, one of the most difficult mathematical problems, merely by chance. There is no such thing as chance. The same power that rules the planets, and causes the sun to shine by day and the moon by night, also governs every action in the animal, vegetable, and mineral worlds. But it is in vain that I adduce instances, either from physiology or natural history, to show "Studens" that there is a God, unless his mind is in a state similar to that of David's when he uttered the above graphic sentence; or that of Galileo, when he said, that the formation of a single *straw* would convince him that there is an Almighty Power; or that of the magnanimous Newton, when, in his last hours, he said that he was only like a little child gathering pebbles on the shore, while the great ocean of truth lay before him unexplored; or that of the immortal bard, when he exclaimed, "Books in the running brooks, sermons in stones, and good in everything;" or when, in raptures at the wonderful constitution of man, he said, "What a piece of workmanship is man; how noble in reason, how infinite in faculties; in form and moving how express and admirable; in action how like an angel; in apprehension how like a God; the beauty of the world, the paragon of animals." For my part, I cannot see anything in our studies calculated to lead to infidelity. Certainly, if our minds are bent on scepticism we can find ample scope for the exercise of it, either in the volume of Revelation or Nature, as there are mysteries in each, which the most gigantic minds cannot comprehend. But this should lead us to *adore* the wisdom of their omnicient Author, and bow, in meek submission, to what they teach.

The *books* which I would advise "Studens" to take home to his lodgings and study carefully, are,—"Locke's Conduct on the Understanding," "Locke on Christianity," "Butler's Analogy," edited by either Lord Brougham or Dr. T. Chalmers, and "Dr. Paley's Natural Religion;" and, if these will not irradiate his infidelity, and show him, that instead of his studies leading to scepticism, they are perfectly calculated to disabuse his mind of the least tendency towards it, and teach him,—

"To look *through Nature* up to Nature's God,"

Then, Mr. Editor, there is no other resource for him but the Holy Scriptures, to which you have very properly directed him, and which is able to make the simple wise.

It might not be amiss for "Studens" to attend the ministry of such a man as the Rev. Dr. Cummings, Crown-court, Covent-garden; and the Doctor would soon enable him to see, that even in the discovery of chloroform the being of a God is manifested. An apology, Mr. Editor, is due for the *unintentional* length of this communication; but the importance of the subject will plead my excuse.

I am, Sir, your obedient servant,
H. HASTINGS, M.D.

Stokenchurch, Feb. 4, 1850.

ON THE SIZE OF A FŒTUS BEING A TEST OF UTERINE AGE.

[To the Editor of the Medical Times.]

SIR,—Your Correspondent, Mr. Warren Fincham, certainly gives us an example of a very small child living several hours. But I can hardly agree with him in the opinion with which he concludes, that the weight or measurement of a fœtus ought to be taken as evidence of its uterine age. At the full time the weight varies from four pounds to twelve, and even more; and it is only reasonable to suppose, as respects the earlier months, that a fœtus, born at the full time, with a weight either much above or much below the average, would be proportionably either above or below the average, throughout at least the better half of utero-gestation. Viability must, I think, depend more on uterine age than on size and weight; but I believe it impossible to determine the age, in premature cases, from either the weight or the measurement, for the reasons I have given. I once had a case of twins, where the first fœtus born weighed only a pound and a half, while the second weighed more than three pounds. Both lived several hours. Their uterine age must have been the same, unless we are to believe in superfœtation, which I, for one, do not. And I recollect another premature twin case, where one child weighed two pounds and a quarter, and the other two pounds and three-quarters. In this latter case, the child that weighed the least lived several hours longer than the other.

I am, Sir, your most obedient servant,
R. U. WEST.

Alford, Lincolnshire, Feb. 16, 1850.

MORBUS COXARIUS.

[To the Editor of the Medical Times.]

SIR,—In your Number of the 25th January are some remarks made by Mr. Henry Smith, on the late operation for excision of the head of the femur, by Mr. Morris, of Spalding. I agree with Mr. Smith, as to the success of the operation in this instance; but before the operation, how was it possible to form a correct opinion as to the state of the acetabulum? This must be anything but an easy matter, even in cases where the head of the femur is dislocated. Many cases will be found, I suspect, where both the femur and bones of the pelvis are diseased. The following case, and recent dissection, you may consider worth recording:—

Private Denis Byrne, aged 20, (Irish,) a recruit, of fair complexion, blue eyes, and rather slight frame, was admitted into hospital in August, 1847, with dull pain in the right knee joint, which soon turned into rheumatic fever, there being much pyrexia, and severe pain in almost every joint of his body. By October, the pain was confined to the right knee-joint, which was hot, swollen, and painful to the touch. All acute symptoms subsided by active treatment. In November, 1847, I first remarked stiffness of the right hip-joint, but there was no pain, even on pressure, round the joint. The knee was slightly enlarged, stiff, and painful on motion. He was now cupped along the thigh; given the compound decoction of sarsaparilla, with a blue pill at bed time, to improve his general health; at the same time a generous diet was prescribed. In January, 1848, there was actual swelling of the right hip-joint, with pain on pressure; the leg was apparently lengthened about an inch; but, on measuring the limb, this was found in reality not to be the case. On striking the heel, much pain was felt in the knee, though but trifling in the hip-joint. An attack of dysentery now came on, which reduced him a good deal. By May, 1848, there was really slight shortening of the limb, stiffness of the hip-joint, flatness of the nates on the side affected, loss of prominence of the trochanter major, and much pain in the joint on any motion. An issue made below, and in front of the joint, quite removed the pain; a leather splint was also applied. The man's health wonderfully improved, and he was discharged from hospital in seven months, as a convalescent in barracks, preparatory to being discharged the service. The joint was anchylosed; there was some use of the limb, and the man got about well with one crutch; but unfortunately, in March, 1849, he came to me complaining of a return of the pain to the joint. I found suppuration had taken place; an abscess was pointing below and in front of the joint. I gradually evacuated the matter by making several small punctures with a needle. In September slight cough made its appearance, the sputa being mucous, and occasionally tinged with blood; no pain in the chest or febrile symptoms. There was dulness on percussion over the right lung, and a diminished quantity of air admitted into the lung. The purulent discharge from the hip-joint now became large. In December hectic fever and diarrhœa appeared, from which he died on the 19th January last.

Post-mortem Appearances.—The body was almost a skeleton. *Thorax.*—The right lung strongly adhering to the ribs from old disease; congestion and softening of the lung; bronchial glands enlarged; heart pale, small, and flabby. *Abdomen.*—Liver large, pale, and of very firm texture; scrofulous enlargement of the mesenteric glands; thickening of the transverse colon; the mucous membrane of a pinkish colour. The right leg was shortened one inch, the knee slightly

bent, and turned inwards; anasarca of the foot and ankle. There was an ulcer of the skin the size of a crown piece, below and in front of the right hip joint, through which a probe could be passed to the rough neck of the femur. On cutting down to the joint, the capsular ligament was not to be found; the head of the femur was retained in the acetabulum chiefly by a layer of thin, but dense fat, mixed up with a few fibrous bands. About half the head (with the ligamentum teres) had been removed by ulcerative absorption; what remained appeared as if chopped short off with a hatchet; the bone was black and very rough from the caries; the neck was shortened and in a similar state of disease; the cotyloid ligament was destroyed; the acetabulum was widened, discoloured, and very rough; I detached several loose spiculæ of bone with my fingers. At the bottom of the cavity was a large, irregular perforation, through which I passed two fingers, and touched the fascia covering the iliacus internus muscle. This was healthy; the muscles surrounding the joint were greatly disorganized.

I am, Sir, yours truly,
T. W. Barrow, Assist.-Surg.
Mullingar, Ireland. 19th Regiment.

THE COLLEGE DIPLOMA.

[To the Editor of the Medical Times.]

Sir,—A subscriber in your Number for Dec. 22, 1849, asks, "Has a member of the College of Surgeons the same right to practise generally as a licentiate of the Apothecaries' Hall, London; and which of the two is the legally qualified practitioner, strictly speaking?" You answer, and your answer is *legally* correct: "A member of the College of Surgeons is not legally entitled to practise medicine, yet both member and licentiate are legally qualified; the one to practise surgery the other generally." This is the law, but is it just? The licentiate can bleed, blister, physic, set fractures, reduce dislocations, perform operations, and nobody knows what. In the Hall curriculum he is not called on to attend either surgical practice or surgical lectures. Under such circumstances, it is contrary to reason to infer such a conclusion as the licentiate pretends to, viz., that he has a perfect right to attend surgical cases. But to return,—the member, poor soul, is put on an equality with the quack, by some knowing people, though he has been required to study nearly all that the licentiate has, *medicine* as well as surgery, chemistry, materia medica, and to have been only one year less in the Profession before he can get a diploma, though, mind, a year older and one year's more sense. He cannot even legally practise, nor legally demand pay for his services, except in a surgical case. Every unprejudiced person will allow, that a member of the College only has a *just* right to practise in any way he chooses, and a right to demand those very privileges which the licentiate enjoys. His education, if he entered the Profession in youth, has cost as much, and, in some cases, more. He is as respectable, and often more so, and, if he takes the part of an apothecary, and dispenses medicine, need I ask, whether the apothecary does not borrow and assume the name of surgeon? If one is liable to prosecution under such circumstances, I do not see why the other should not be also. What is wanted, is a college of general practitioners, independent of other corporations; and I see no reason why such an Institution should be considered second to any in the kingdom, rightly governed. But the name of general practitioner is abominated by all classes of practitioners. I am glad application has been made to the College of Surgeons, and I am glad also, that the Convention of the Institute has come to the determination of raising a new College, in case a refusal is given. One College is, in my opinion, enough for the exigencies of the Profession, and to degrees of relationship of its members I have no objection.

I am, Sir, yours respectfully,
A Reformer of Abuses.
February 2, 1850.

THE "MEDICAL DIRECTORY."

[To the Editor of the Medical Times.]

Sir,—I am a subscriber to your valuable Journal, and at the same time one of those unfortunate persons to whose names an asterisk is appended, in the last "Medical Directory."

I could have supported the weight of this star of distinction with which the worthy Editor has honoured me, and even if he had pelted me with periods, squeezed me within a parenthesis, or pilloried me upon an obelisk, I should have sustained it with uncomplaining and philosophic fortitude, had I not found that you had entered the lists, and had thrown down the gauntlet in his defence, recommending him not to stop at these lesser punishments, but altogether to extinguish and annihilate us.

Knowing you the defender rather than the oppressor of the injured, I have no doubt that, when you hear the motive which has influenced some of us in withholding the return to Mr. Churchill's questions, you will be induced to judge us more leniently, and advise a less summary proceeding. It is this. The London College of Surgeons create an unjust distinction in their body. By raising a portion to the distinction of Fellows, they depressed and disgraced all the rest. No sooner have they created this unfair and fraudulent, because retrospective distinction, than Mr. Churchill has a book printed, pointing it out to the world. Mr. Churchill is, of course, at liberty to do as he pleases in such a matter, but he cannot expect me to assist him in recording my own degradation.

I remain, your obedient servant,
Feb. 14, 1850. One of the *ed.

MIDDLESEX COUNTY ASYLUM, HANWELL.

[To the Editor of the Medical Times.]

Sir,—Permit me to contradict, in the most emphatic manner, a statement made in your Journal on Saturday last, respecting the Hanwell Asylum. Your Correspondent, "A Physician and Resident Proprietor," states, that "there are cases, and plenty of them, even in Hanwell, which are placed almost constantly under mechanical restraint of some sort or other." This statement is utterly false. No patient has been placed under mechanical restraint at the Hanwell Asylum, for these ten years past.

I am, Sir, your obedient servant,
John Hitchman,
Resident Medical Officer to the Female Department of the Asylum.
Feb. 19, 1850.

IODIDE OF POTASSIUM IN ENLARGED BURSA PATELLÆ.

[To the Editor of the Medical Times.]

Sir,—I know not whether I am advancing any thing new; but I have lately, on several occasions, found a strong solution of iodide of potassium so successful in the treatment of enlarged bursa patellæ or housemaid's knee, that I thought the subject might not be uninteresting to my professional brethren.

My plan is, of course, to enjoin rest, and apply the solution constantly, by which simple means I have found the swelling subside more quickly than by any other treatment.

I am, sir, your obedient servant,
George Rodwell, M.R.C.S. and L.A.C.
Loddon, Norfolk, Feb. 19, 1850.

HEALTH OF LONDON DURING THE WEEK ENDING FEBRUARY 16.

The public health, as compared with that of former periods, is in a favourable state. Last week the mortality in London continued to decline, and the deaths were only 938, showing a decrease of 19 on those of the former week, and of 159 on the weekly average of last January. In the corresponding weeks of 10 previous years (1840-9) the average was 1041, which, if corrected for increased population, becomes 1136; the present decrease of mortality, as compared with former years, is therefore 198. In the epidemic or zymotic class of diseases, the deaths last week were 144; in the corresponding weeks of the years 1840-9 they fluctuated between 129 and 333; the corrected average is 209. From phthisis (or consumption) the deaths last week were 113; at the same period of previous years they ranged from 115 to 170. From other diseases that affect the respiratory organs, (exclusive of hooping-cough) the deaths were 199; in previous years, at this time, they ranged from 115 to 330. To take particular diseases: small-pox was fatal to 6 persons, less than one-third of its former mortality; scarlatina to 13, while the average is 34; hooping-cough to 31, the average being 46; typhus to 29, the average being 36. The deaths from measles were 21, a mortality which is about the usual amount. From asthma and bronchitis there were 110 deaths, the average is 100; from pneumonia there were 76, whilst 96 forms the average. Diarrhœa was fatal to 18 persons, which exceeds the average by 7, though the number who died of this complaint in the same week of last year was 27.

The mean height of the barometer at the Royal Observatory, Greenwich, during the week was 29·754 in. The mean temperature exceeded the average of the 7 years by 6° 9′; on Sunday it was 9°, and on Friday 14° 9′ above the average. On Wednesday, when the mean temperature was 35° 1′, it was slightly below the average of that day.

The deaths in the several hospitals of London occurred as follow:—

GENERAL.		Northumberland-house	0
St. George	4	St. Luke	0
Westminster	2	Miles'	1
Charing-cross	2	Warburton's	1
Middlesex...	7	Lunatic Asylum, Bow ...	2
University College ...	4	Bethlem	0
Royal Free Hospital ...	0	Lunatic Asylum, Brixton	0
King's College	2	Retreat, Clapham ...	0
St. Bartholomew... ...	11	New County, Wandswor.	3
London	2	Peckham House ...	0
Guy's	5	Camberwell House ...	0
St. Thomas	5	LYING-IN.	
MILITARY AND NAVAL.		Queen Charlotte's ...	0
Royal Hospital, Chelsea (South)	2	British	1
Royal Hospital, Greenwich (East)	8	City of London	4
Royal Military Asylum	0	FOR CONVICTS.	
Coldstream Guards Hos.	1	Hospital Ship, Unité ...	0
Grenadier Guards' Hospital	0	Penitentiary Hospital, Millbank	0
Scots Fusilier Guards ...	1	FOR PARTICULAR CLASSES.	
Royal Ordnance	2	Female Servant Invalid Asy., Stoke Newington	0
Dreadnought Ship ...	2	German Hospital... ...	0
LUNATIC.		French Hospital	0
Kensington House ...	0	Portuguese Jews' Hospital	0
Munster-house (Fulham)	0	German Jews' Hospital	1
Normand-house(Fulham)	0	FOR SPECIAL DISEASES.	
Otto-house (Fulham) ...	0	Small Pox...	1
Sussex & Brandenburgh-house (Fulham) ...	0	Fever Hospital	1
Blacklands-house ...	0	Lock	0
		Consumption, Brompton	1

TOTAL, 75.

MORTALITY TABLE.

Deaths in the Week ending Saturday, Feb. 16, 1850.

(Metropolis.)

Causes of Death.	Total.	Average of Ten Weeks.
All Causes	938	1041
Specified Causes	935	1033
Zymotic (or Epidemic, Endemic, and Contagious) Diseases	144	191
Sporadic Diseases:		
Dropsy, Cancer and other Diseases of uncertain or variable seat	41	56
Tubercular Diseases	166	183
Diseases of the brain, Spinal Marrow, Nerves, and Senses	119	123
Diseases of the Heart and Blood-vessels	37	35
Diseases of the Lungs, and of the other Organs of Respiration	199	202
Diseases of the Stomach, Liver, and other Organs of Digestion	62	60
Diseases of the Kidneys, &c.	12	6
Childbirth, Diseases of the Uterus, &c.	10	12
Rheumatism, Diseases of the Bones, Joints &c.	8	8
Diseases of the Skin, Cellular Tissue, &c.	1	9
Malformations	3	2
Premature Birth and Debility	27	22
Atrophy	27	13
Age	42	72
Sudden	15	14
Violence, Privation, Cold, and Intemperance	22	26
Causes not Specified	3	8

The following is the number of Deaths occurring from some of the more important special causes:—

Apoplexy.....	19	Heart	30	Phthisis 113	
Bronchitis ...	88	Hooping-cough	31	Pneumonia ...	76
Cholera.....	...	Hydrocephalus	36	Scarlatina	13
Childbirth	8	Influenza	1	Small-pox	6
Convulsions...	39	Liver	14	Stomach	4
Diarrhœa	18	Lungs	6	Teething	10
Dropsy	17	Measles	21	Typhus	29
Erysipelas ...	9	Paralysis	25	Uterus	2

BIRTHS AND DEATHS.

	Births.	Deaths.	Births over Deaths.
Males	724	483	241
Females	752	455	297
Total.....	1476	938	538

METEOROLOGY OF THE WEEK.

Electricity.*	No electricity has been shown during the week.							
Rain in Inches.	0·00	0·10	0·06	0·00	0·15	0·05	0·17	SUM 0·53
Amount of Horizontal Movement of the Air.	Miles. 115	305	130	115	225	275	260	SUM 1445
General Direction of Wind. P.M.	W.S.W.	S.S.W. & W.S.W.	S.W.	N.N.W. & S.W.	S.S.W. & S.W.	S.W.	N.W.	S.W.
General Direction of Wind. A.M.	W.S.W.	S.S.W.	S.W.	W.	S.	S.W. & W.N.W.		
Difference between the Mean Temperature of the day and the same day on an average of 7 years.	+ 9·0	+ 8·3	+ 4·6	− 0·8	+ 5·2	+ 14·9	+ 7·2	+ 6·9
Ditto. Dew Point.	34·4	38·7	34·0	25·5	40·4	49·7	35·5	36·9
Mean of Thermometer. Dry.	42·3	42·3	39·5	35·1	42·1	52·7	45·6	42·8
Mean of Barometer.	29·919	29·523	29·193	29·917	29·867	29·880	29·979	29·754
Day.	Sunday	Monday	Tuesday.....	Wednesday.	Thursday ...	Friday	Saturday ...	Means ...

* In this Column, A. stands for Active; N. for Negative; and P. for Positive.

MEDICAL NEWS.

APOTHECARIES' HALL.—Names of gentlemen who passed their examination in the science and practice of Medicine, and received certificates to practise, on Thursday, 14th February, 1850:—William Henry Thornton, Thornhill, near Dewsley; George Hornby, Pocklington, Yorkshire; George Philip Rugg, Maidstone; William Hughes, Market-place, Lanrwst, N. W.; William Tidmas, Manchester.

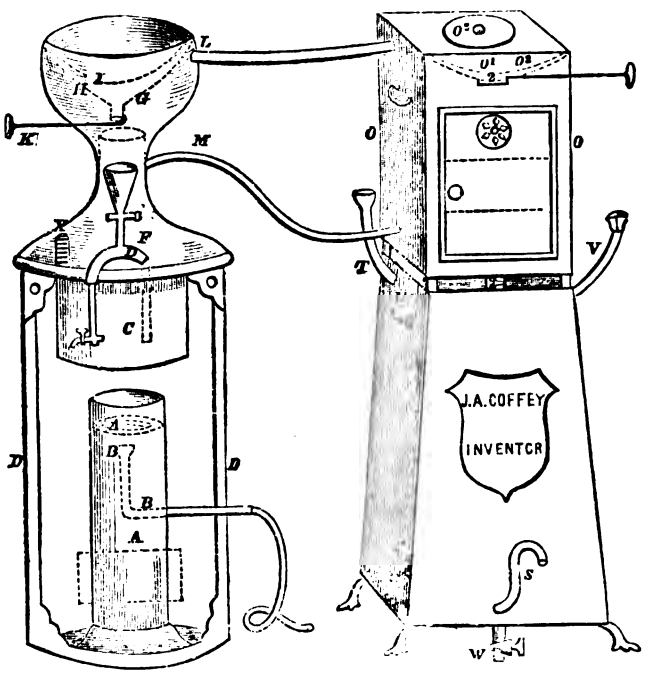
ARMY APPOINTMENTS.—24th Foot: Assistant-Surgeon James Lewis Holloway, from the Staff, to be Assistant-Surgeon, vice Furlonge, deceased.—46th Foot: Assistant-Surgeon Edward James Franklyn, from the Staff, to be Assistant-Surgeon, vice Woolhouse, who resigns. Hospital Staff: Acting Assistant-Surgeon Horatio George Martelli, to be Assistant-Surgeon to the Forces, vice Holloway, appointed to the 24th Foot. Surgeon George Roche Smith, of the 2nd Foot, has been placed at the bottom of the list of Surgeons in the Army, on the 12th Dec. 1849.

NAVAL APPOINTMENTS. — Assistant-Surgeon George H. Edwards (1847) to the Adventure storeship at Deptford.

OBITUARY.—On the 24th ult., at Hull, Robert Craven, Esq., F.R.C.S.E., Surgeon to the Hull General Infirmary.—On the 13th inst., Cornwall Reynolds, Esq., of Mare-street, Hackney, Surgeon, R.N.

THE MOUNTAIN IN LABOUR.—Every one who takes an interest in such matters must have wondered at the cause of the announcement, that the *Lancet* of last week would be published on the Thursday instead of the Saturday, as usual. The secret is out. The thunderbolt, forged with great cunning and labour in the literary smithy of Bedford-street, was launched by the newly constituted Jupiter Tonans of the *Lancet*, in the Lecture-room of the College of Surgeons, on the celebrated 14th of February; and the *Lancet* was published in time to prepare for this great event. Let us draw up the curtain. The members were all assembled, patiently waiting for the entrance of the Orator, the Council, and their friends, upon the scene, when, lo! a very atrabilious looking gentleman, with remarkably long ears, whom we at first mistook for a facetious effigy of Midas, and ycleped, as we afterwards found, Edwin Lee, Author of a book on Medical Reform, &c., &c., got upon his legs, *Lancet* in hand, and informed the Company he observed, in that print, that the chosen Orator of the College had voted against the amendment of the Charter, and he thought it would be a good opportunity for the members to express their feelings on the matter. This address was cut short by enormous hissing, mixed with shouts of approbation; for there were some members present who were evidently unable to discriminate between a manly expression of their opinions, in a legitimate manner, and an unmanly insult, on a great public occasion, to a distinguished member of the Profession, because he took the liberty of voting, upon a public question, according to the dictates of his conscience. The confusion of the scene it is difficult to describe. Yells, cheers, hisses, reverberated through the Hall in admirable discord, successfully drowning the voice of the speaker, who stood like a clown in a Christmas pantomime, with mouth open, eyes expanded, and arm suspended in mid air, in a state of mesmeric rigor. We fancied we heard him say, "Here I am!" At this juncture a very sensible young surgeon rose and suggested, that "that was not the proper place to make a disturbance,"—a sentiment the members vehemently applauded. The lean Cassius of the drama looked more yellow; still more bent upon conspiracy, when Mr. Belfour and Mr. Quekett privately remonstrated with him, and peace was restored. Do you ask, then, why it was determined, that the mountain of Mr. Saville's printing-office should groan in premature labour forty-eight hours before the usual termination of what Dr. Tyler Smith would, in his facetious manner, term the cycle of periodicity? Simply to give birth to this very ridiculous mouse, and that Mr. Edwin Lee might have the opportunity of proving himself a very Dogberry,—of confessing that he belonged to that order of animals of which the original character wrote himself down a member.

MR. COFFEY'S STILL AND CONDENSING APPARATUS.—We most earnestly call the attention of our readers, particularly those engaged in pharmaceutical operations or chemical manipulations, to Mr. Coffey's "Patent Esculapian Still and Condensing Apparatus," of which the annexed engraving exhibits a section.



B denotes a burner, supplied with gas by a flexible pipe; which, lighted for operation, boils the contents of the boiler or still, C, the vapour from which, ascending through the neck of the still-head, F, into the cup-shaped vessel, G, heats the underside of the vessel, H, and the evaporating pan, 1, operating upon their contents. The vapour, condensed by contact with the vessel H, will fall down the sides of the vessel G, passing through the pipe, M, to a distillating condenser of novel form, contained in the chamber beneath, the hot vapour ascending and passing through the pipe, L, to the hot chamber, and circulating around the oven contained therein, operates on what may be therein; or in the evaporating pan, O1, provided with a lid, O2, and contained in O3, passing through the pipe to the condenser, wherefrom it flows off by the pipe S. In conducting the process of distilling, it is necessary to fill the chamber containing the condenser with cold liquid by the funnel-pipe, T, the pipe, U, allowing any waste to flow off. By means of the pipe, V, communicating with the interior of the distillating condenser, the superfluous gases pass off, preventing accidents, the pipe and cock, W, allowing any lodgment therein to be cleaned out when necessary. By shutting the valve, K and 2, the pans or vessels, H and O3, may be used to heat a retort, or otherwise, first removing the moveable pan. X, steam guage and thermometer. D and C, a syphon pipe for charging with glass, liquor guage, and funnel. D D, furnace. A A, pipe for conveying air. The interior of condenser is not shown above. The advantages of Mr. Coffey's invention are many. In the first place, the apparatus is portable, and can be put into action in a few minutes; as it does not require coals, coke, charcoal, or fuel of any kind, it yields neither smoke, ashes, or other nuisanee; and performs in an extraordinary small space, and in a superior manner (as the heat can be regulated to the greatest nicety from 200° F. to 300° F.) the chemical operations of distilling, decocting, evaporating, ointment and pomatum making, sand bath for glass retort, drying, condensing, boiling, distilled water, &c. The size varies, from 1 to 1000 gallons. A One Gallon Still has the following appendages—Decocting pan, 9 inches over; evaporating pan, 9 inches over; sand bath, drying closet, 9 inches square, steam and liquor guages, safety valve and condenser, peculiarly novel, compact, ingenious, and most powerful in its refrigery; it has the advantages, also, of being easily taken to pieces, washed, or cleaned from any essential oil, and put together cleansed in five minutes. We recommend our readers to visit Mr. Coffey's manufactory, 19, Sidney-street, Commercial-road, and examine for themselves his very unique apparatus.

OBITUARY.—On the 14th inst., at Park-place, Chelsea, aged 82, Thomas Dixon, Esq., many years surgeon of the Hereford Regiment. On the 15th, at Newport, Isle of Wight, aged 88, Dickins Buckle, Esq., Deputy Inspector-General of Hospitals.

THE PATENT PORTABLE SUSPENSION STOVE.—Another most important invention claims our attention and recommendation—the patent portable suspension stove, the construction of which secures at once two most important advantages, which, it would seem, have never, until now, been realized in connexion with each other. The Arnott and other hot air stoves throw out all the necessary heat, yet afford no means of pure ventilation, an evil which the patent portable suspension stove seems to remove. By a simple and most felicitous contrivance, the patent portable suspension stove produces a warm and genial atmosphere. The top of the stove is of a conical shape, and is supported by two standards fixed to an ornamental pan or bottom. The fire-pail stands immediately under the cone, leaving just sufficient space between the two, to allow a free passage of air over the fire, and up the cone, into the chimney. By this means a steady and uniform draught is secured in the stove-pipe, keeping up perfect ventilation, and preventing the generation of injurious gases. To Medical men, who are liable to be called out during the night this stove is a great

acquisition. It gives a comfortable warmth, with free ventilation; it is perfectly safe, and will burn through the night without attention, at a cost not exceeding three farthings. Tin vessels are made to fit the stove, to supply hot water at any moment, and thus a cup of coffee may be obtained without delay. The *first time* it is lighted, there will be an unpleasant smell for a few hours, caused by the drying of the blacking, but this does not again occur. We think Messrs. Brown and Green, of Luton, the patentees, deserve well of the public generally, and the Profession in particular. To their attention we cordially recommend this very useful apparatus.

KING'S COLLEGE HOSPITAL.—The Secretary's Annual Report states, that during the past year 22,309 patients had been received, including 1,261 urgent cases admitted into the wards, and 424 poor married women who were attended at their own homes during confinement. The increase of patients during the last twelve months was caused in great measure by the recent cholera visitation; to mitigate the ravages of which the hospital authorities made every possible exertion, and in doing so increased the outstanding debt to nearly 530*l.*

GENERAL LYING-IN HOSPITAL.—The annual report of this Institution showed that 311 in-patients, and 445 out-patients, had been attended to during the past year. The receipts from dividends and subscriptions amounted to 1515*l.* 4s. 4d.; the average annual subscriptions for the last five years being 360*l.* 14s. A resolution was passed that the in-patients should pay 2s. 6d. each, for their washing—rather a paltry proposal, and not even excusable by a poverty of funds.

LONDON FEVER HOSPITAL.—The Secretary's Report congratulates the Governors upon the steady diminution of fever cases since 1843, when the cases admitted were 1462; the number during the past year only amounting to 714. The extraordinary diminution in 1849 was partly attributed to the fearful ravages made by the cholera among the poorer class of victims, amongst whom fever generally predominates. The admissions in the hospital varied from 43 in November to 83 in January; the average number for each month being 54. Out of the 714 patients admitted during the year, 586 were discharged cured; sent to other hospitals, 4; died, 106; remaining, 18. From the financial statement it appears, that the total income, including a balance of 453*l.*, from last year, amounted to 2754*l.* 7s. 4d. The expenditure, including the investment of 750*l.* in the purchase of Three per Cent. Consols, amounted to 2696*l.*, leaving a balance of 58*l.* 6s. 4d. in the hands of the Treasurer

SOUTHERN AND TOXTETH HOSPITAL, LIVERPOOL.—The annual Report of this Hospital has recently been produced, from which it appears, that the debt still owing amounts to 800*l.* The proceeds in favour of the Institution, from the fancy-fair, amounted to 3197*l.*; 2000*l.* of which were invested, to add to the permanent income. A legacy of 500*l.*, left by the late Mr. Heyes, has also been received. 2722 patients were relieved during the past year; of these, 2133 were out, and 589 in-patients. 370 were severe surgical cases; 1510 accidents and simple fractures. Seventy beds, besides two separate wards, have been added to the accommodation. The ventilation has been greatly improved.

THE BOARD OF GUARDIANS OF THE CHORLTON UNION.—About three months since the Guardians of the above Union, in consequence (as is reported) of a dispute with their medical officers arising out of the late visitation of cholera, proposed to reduce the payment to these gentlemen from five shillings (the existing rate) to three shillings per case of sickness placed under their care. The grounds for this proceeding were said to be—that the appointment of Poor-law Surgeon was analogous to that of Surgeon to a public charity, and served as an introduction to private practice; that the rate of payment was higher than obtained in neighbouring unions; and that other qualified practitioners could be found who would take the appointment at the reduced rate. In communicating this proposal to the Poor-law Board, the Guardians further stated, that they were fully prepared to accept the resignation of their Medical Officers, should they decline to receive the reduced payment. The Manchester Medico-Ethical Association, together with the Union Medical Officers, memorialized the Poor-law Board against any reduction of medical salaries on such principles; and, in consequence, the Board refused to sanction the proposal of the Guardians:—"At a meeting of the Committee of the Medico-Ethical Association, held Feb. 7, it was unanimously resolved,—That the following minute be made in the books of the Association, and that copies be forwarded to the Poor-law Board, the General Board of Health, and the Registrar-General; and also for publication, to the Editor of the *Lancet*, *Medical Gazette*, and *Medical Times*. The Committee of the Manchester Medical-Ethical Association conceive it right to record the high sense which they entertain of the just and impartial conduct of the Poor-law Board, in their recent refusal to sanction a proposal of the Chorlton Board of Guardians to reduce the salaries of their Medical officers. The Committee further would urge upon all members of the Medical Profession the policy as well as the justice of giving cordial assistance to the central authorities in London, by supplying them with statistical and other information when applied for; recent experience having shown, that it is to them the Profession must chiefly look for support and protection, in any contest that may arise out of the growing tendency of Local Boards to depreciate Medical services.—Signed—J. L. BARDLEY, M.D., President; J. AIKENHEAD, W. C. WILLIAMSON, Hon. Secs.

JOHN HUNTER.—In our report of the Hunterian Oration last week, we omitted to give the following very interesting and unpublished letter from the immortal physiologist; it is from the collection of Mr. T. M. Stone, the Librarian of the Royal College of Surgeons, and is addressed to the Master, Wardens, and Court of Assistants, of the Corporation of Surgeons, as follows:—"Gentlemen,—At this period, in which the surgeons of Great Britain have deservedly acquired the highest reputation in Europe, both by their practice and publications, it appears to be a reflection upon them, that the Corporation of Surgeons of London should not be possessed of a public surgical library—a circumstance so extraordinary, that foreigners can hardly believe it. If a custom had been established at the time the surgeons were incorporated, that every member should send a copy of his publications to the Company's library, it would have at present contained the works of many of the best writers in surgery, which might have proved a valuable collection of instructions for the improvement of the Profession. As the smallest beginnings may in the end lead to the greatest acquisitions, I have done myself the honour of presenting to the Company through your hands, the few observations on anatomy and surgery which I have published; and should the other members of that body be induced to follow my example, and by presenting their works, establish a library, which shall hereafter become both a public benefit and an honour to the Corporation of Surgeons, I shall consider it as one of the happiest events of my life to have been at all instrumental in such an establishment.—I have the honour to remain, gentlemen, your most obedient humble servant, "JOHN HUNTER."

THE BOARD OF GUARDIANS OF ST. LUKE'S, CHELSEA, AND THEIR MEDICAL OFFICERS.—The Board of Guardians of the parish of St. Luke, Chelsea, lately met to consider the applications of the Medical officers, Mr. Warder and Mr. T. Keen, for compensation for increased labour and expense incurred by those gentlemen during the prevalence of the cholera. It appeared, from the letter of Mr. Warder to the Board, that his labours had been very heavily increased during the year 1849; that he had attended 3,199 cases of sickness, including 72 cases of Asiatic cholera, and many of diarrhœa, during that period; the number of cases exceeding those of 1848 by 961; and those of 1847 by 1,308; the cases being distinct from those attended by the house-to-house visiter. The letter of Mr. T. Keen alluded to the returns of the number of cases attended, and set forth the additional labour and anxiety to which he had been subjected by the increase of the epidemic, as well as the increased cost of drugs, the expenses attending the employment of an assistant, whom he had been obliged to engage, the loss of his own health and his private practice. These gentlemen, however, urged their claims for additional remuneration in vain. The letters having been read, Mr. Symons moved, and Mr. Soby seconded the resolution, that 15*l.* be presented to each of them as a gratuity, in consideration of the increased labour, &c., incurred; after a warm discussion, 9 hands were held up against the resolution, and 7 in favour of it. This apparently just claim was therefore repudiated, and the very modest sum on which the division took place refused by the very liberal majority of the guardians.

POST-MORTEM BURNING.—Mary Newton, the alleged Bridgnorth matricide, it is believed, will be arraigned, for the third time, at the forthcoming Shrewsbury Assizes. This somewhat unexpected circumstance has induced Dr. Wright, of Birmingham, to withhold, for the present, his "Researches on Vital and *Post-Mortem* Burning;" which, we understand, imbody some results nugatory of hitherto received opinions.

THE BELGIAN PHARMACOPŒIA is about to be published. The Academy wished it should be in French; the Medical Commission and the druggists, that it should be in Latin. To settle the question, the Government decided it should be in both languages.

TO CORRESPONDENTS.

"The Hunterian Oration."—We have received several letters upon the attempted row at the College of Surgeons, and its total failure. Our Correspondent swill pardon us, that our dislike to hit a man when he is down, and our personal good nature, will not allow us to publish these communications. All agree, however, upon the bad policy and wretched taste of the conspirators. Every dog has his day; but now,—February, 1850,—no one man can say, "I am Sir Oracle; let no dog bark."

"Dr. Thompson, Surgeon to the Tyrone Infirmary," has kindly taken the trouble to inform us, that we—our Irish Correspondent, rather—labours under a great mistake, in supposing that Dr. Jacob's suggestion, with regard to putting up pathological preparations in spherical glass vessels containing pure water, is intended to refer to their permanent preservation. We are aware that the natives of the sister island, sometimes write, and read too, very crookedly; but how so very ridiculous a reading could have been imagined, we are at a loss to conceive.

"Crichton Royal Institution for Lunatics."—We propose to take an early opportunity of noticing Dr. Browne's Tenth Annual Report of this Asylum.

"J. S., Sunderland," and other Correspondents, inquire when the remaining papers to complete the volume on Diseases of the Heart, may be expected. We repeat the reply we lately made to the same question, viz., that we received a communication from the Author, on the 6th inst., to the effect, that he was bestowing all the time and attention he could give to the subject; and we hope, therefore, soon to present our readers with the remaining portion.

We will endeavour to obtain a report of "a case of some importance to the Medical Profession," decided in the City County Court, on the 22nd. We are obliged to Correspondents who call our attention to these matters.

"J. W. Moses, St. Asaph."—The observations of Regnault are to be taken, of course, for what they are worth. The experiments of our Correspondent on the dormouse are highly interesting, and agree with those of Berthold. The animals specified by Regnault were marmots; which, in their torpid state, consume much less oxygen; can live in an atmosphere which would not support them awake,—(Spallanzani, if we remember rightly, said, they could be placed, without injury, in even the most irrespirable gas,)—and, it was stated, absorb oxygen and nitrogen to such an extent in this torpid state, that they sometimes even increase in weight by respiration alone. The fact was first stated by M. Sace, of Neufchatel.

"J. H. B., Middle Temple."—The experiments of Lord Brougham were conducted, we believe, at Provence, in his *otium cum*,—*et cetera*; and had reference to the "deflexion" and "inflexion" of the rays of light and the formation of fringes. Except to the initiated, they are of little interest.

"Tyro."—You will find an account of the nature and character of Bronchophomy in Laennec. Many physicians now make the patient whisper; the slower words rendering the phenomenon more perfectly.

"A. N., Chelmsford."—In impending death from chloroform, sprinkling with cold water, fresh air, &c., are generally had recourse to. M. Ricord, of Paris, recommends blowing fresh air at once into the lungs, by the mouth of an attendant; he saved two patients by it.

"Invalid, Brighton."—The contra-stimulists were Borda, Brera, Tommasini, and Rasori. They divided their medicines into stimulants and contra-stimulants, in opposition to Brown; who held the doctrine, we need scarcely say, that no change can take place in the excitable powers without previous excitement.

The second edition of the Fifth Report of the National Philanthropic Association shall receive our early attention. This excellent Institution holds its *locale* at No. 40, Leicester-square; and we earnestly recommend it, as established to promote social and sanitary improvements, street cleanliness, and the employment of the poor.

"Dr. Hastings" is answered.

"Dr. Rigby's" communication on the use of Chloroform will appear next week.

"A Non-Restrainer."—When our Correspondent writes like a gentleman, his letter shall have insertion.

"W. Hutton, B.A."—It is quite out of our power to give professional advice in the columns of the "Medical Times." We observe, apparently a very able writer in the "Domestic Economist," occasionally does so; but the safest plan would be to send the person to an hospital.

"Mr. M'Dougall's" Paper is in type, but the crowded state of our columns forbids its appearance this week.

"Vox."—We must decline advising a remedy "for weak knees which are inclined to knock." Our name is not *Dr.* "Medical Times."

"Aberdeen Degrees."—A Correspondent has favoured us with the "Aberdeen Herald." The value of Aberdeen degrees are fully estimated by the Profession. What the public think of them concerns us but in a very secondary manner. As for the disputes between the two rival colleges, to which we have in another place alluded, they can only be compared to a storm in a tumbler.

Our Correspondent at

"——— a dirty town,
A church without a steeple."

is thanked.

Our Irish Correspondent's letter reached us too late for this week's Number.

ORIGINAL LECTURES.

LECTURES
ON
CLINICAL MEDICINE.
DELIVERED AT UNIVERSITY COLLEGE HOSPITAL.

By E. A. PARKES, M.D., Lond.:
Member of the Royal College of Physicians, Professor of Clinical Medicine in University College, and Physician to the Hospital.

LECTURE V.

(Continued from page 132.)

Before quitting the subject of valvular lesions of the heart, there are two points to which I must call your attention. The first of these points is the following:—

Speaking in general terms, the pulmonary circulation is affected by lesions of the left auriculo-ventricular opening, and the general circulation, by lesion of the right auriculo-ventricular opening. The degree depends not only upon the lesion, but on the conditions of the cavities. In valvular lesions of all kinds, the cavities on either side undergo changes according to the lesion, its locality, its kind and amount, &c., and according to the general state of the system, which may favour the growth of strong, powerful, muscular tissue, or may, on the other hand, be unfavourable to nutrition, and may, therefore, lead to that condition in which a cavity, experiencing at its outlet an obstacle which its own strength cannot overcome, and to overcome which it cannot gain strength, necessarily becomes dilated by the pressure of its contained fluid, without a compensating increase in the muscular tissue of its walls. Either of these conditions of the cavities may, however, be primitive affections. A cavity may become hypertrophied and dilated, or dilated merely, without valvular disease. In the former of these cases, if the pulmonary, or general circulation, becomes affected to such a degree as to cause stagnation, it is, in the vast majority of cases, if not in all, through consecutive lesion of the valves. Valvular lesions are the connecting link between hypertrophy, and impediments to the circulation. But, on the contrary, if dilatation be the primitive disease, it may profoundly affect the pulmonary or systemic circulations without disease of the valves, and, in fact, it then puts on the general symptoms of valvular disease, and without the stethoscopic signs is nearly indistinguishable. For the same impediment to the circulation which is produced by a large heart driving the blood backwards in its course through a patent orifice, is produced in the case of dilatation by the impossibility of the weakened heart contracting with sufficient strength on its contents; the heart is never properly emptied; it is ever receiving, but cannot, *pari passu*, discharge, and this stagnation at the central organ is felt throughout the whole extent of its derivative vessels.

As an illustration of this point, let me relate a case which occurred to me a short time since among the out-patients. We have had no case lately in the hospital which can answer our purpose so well as this one, as it is seldom we get a dilated heart uncomplicated by something else. This time last year a man came under my care for cough, dyspnœa, and palpitation. He was about thirty-five years of age, five feet eleven inches in height, sparely made, and had lived very freely. He had never had rheumatism, nor any formidable disease, except, apparently, pleurisy some months before. He had noticed for some months that he was short of breath, that he had coughed a good deal, and had, on the least exertion, become subject to violent palpitation. He had no dropsy, no jugular pulsation, and no pain in the cardiac region. The most careful examination detected no pulmonary disease. The action of the heart was most peculiar; it was irregular in the highest degree, with an extremely weak, almost fluttering impulse. There did not appear to be any alteration in the position of the heart or in the amount of the præcordial dullness, and the impulse was felt almost entirely at the apex. Even when the patient had been in a horizontal position for fifteen minutes, the irregularity continued, though in a lessened degree, and on quick movement was increased to an extent that was really frightful. The pulse at the wrist was extremely feeble and small, not locomotive, and of course irregular. Repeated examinations detected no murmur in the cardiac region. This at first I thought might be attributable to the weakness of the heart and the small current of blood, but after a fortnight's treatment with expectorants and camphor, when the heart's action had become stronger and more regular, still no trace of murmur could be heard. The sounds were, of course, as irregular as the action of the heart; frequently nothing was heard but short, feeble, systolic sounds, which had nothing about them of the clearness and sharpness sometimes ascribed to the sounds of dilated hearts. Sometimes the second sounds could be feebly heard, more often they were lost. All the signs pointed, therefore, to this conclusion, that the heart was extremely feeble, and, judging from the extreme irregularity, and the want of murmurs, that it was dilated, and without valvular lesion. For the first three weeks, the man improved under the use chiefly of expectorants, camphor, and occasional sedatives. Then, however, the palpitation returned; he had some fainting fits, and began to suffer from an indescribable feeling of uneasness in the cardiac region. About three months after I first saw him, the legs began to swell, and after a time enormous anasarca had established itself. A little fluid formed in the peritoneum. Then ensued terrible pains in the cardiac region, like angina, which were temporarily relieved by stimulants. The dyspnœa deepened into orthopnœa, and for many weeks before his death he could not lie down. About a fortnight before his death, the expectoration, which had been previously always of a simple kind, became streaked with blood, and subsequently there were several attacks of copious hæmoptysis. All this time the heart's action remained extremely feeble and irregular, but without bruit. There was no albumen in the urine, nor did the abdominal organs appear to be diseased.

After death there was, as we anticipated, pulmonary apoplexy to a considerable amount; and there was a little lobular pneumonia. The anterior margins of both lungs were emphysematous; the pericardium was healthy; there was no fat on the heart; all the cavities of the heart were extremely dilated, and were filled completely with blood; the valves of all were competent, except in the case of the tricuspid, which, though large, could not close, perhaps, the opening, which had increased considerably in diameter. No affection of the endocardium was traceable. The dilatation was greater in the right than in the left heart, and the thinness of the walls, as compared to the large cavity, was more conspicuous here. The walls of the right ventricle were very flabby, not above one line and a-half in thickness at the apex; the muscular fibres had a yellow tint, but were not mottled; under the microscope the fibres were less distinctly striated, and seemed more granular than usual, but were not fatty; there was a yellowish mass attached to a columna carnea, near the apex, about the size of a small nut, the nature of which could not be made out. On the left side, the ventricle was very large; the walls were thicker, but still disproportionably thin; under the microscope the fibres were slightly granular, but more distinctly striated than on the right side. The walls of both auricles were extremely thin. The liver was intensely injected in the centres of the lobules; in fact, there were here almost ecchymoses; the peripheries of the lobules were pale, contrasting with the red centres. Under the microscope, the cells seemed healthy. The kidneys and the other abdominal organs were healthy.

We had, then, in this case, the general symptoms of valvular lesions of the auriculo-ventricular openings, viz., arrest of blood in the systemic circulation, as evidenced by the dropsy and hepatic congestion, and also in the pulmonary circulation, attributable altogether, or nearly, to simple debility of the heart. The large tricuspid opening may probably, towards the last, have allowed regurgitation, but the weak ventricle could not have thrown much blood back, so that, for practical purposes, we may refer everything to the stagnation produced by an incapable heart. And the signs of this disease stand out with remarkable distinctness; we had the effects of valvular lesions on the circulation, without the physical signs which denote these lesions, or their frequent attendants, dilated hypertrophies. In the place of such signs, we had all the local symptoms of an enfeebled and dilated heart, viz., a weak impulse, low and confused sounds, and great irregularity of action.

The course of the affection is easily explained. The obscure point is its origin. Perhaps this disease, like fatty heart, may consist in a mal-nutrition of the muscular fibres, which diminishes their power and permits them to yield to the pressure of the blood. But this point I do not wish to touch on now.

It is seldom that we meet with a case so pure and so exquisitely marked as this one. I have brought it before you to state, that not only may this dilatation be primitive, but may, in various degrees of intensity, be secondary to valvular lesion. It may be combined with hypertrophy, and the degree of predominance of either state causes infinite differences in every case of heart disease. But, once grasp a knowledge of the states themselves, and you will find little difficulty in understanding their combinations.

These two sequences of valvular disease, viz., dilated hypertrophy (the walls bearing to the enlarged cavities a normal or excessive relation,) and dilatation, (the walls bearing to the cavities a lessened relation,) follow more or less in every case of valvular disease of any amount; and, of the two, pure dilatation, as it is by far the most formidable, is, luckily, the most infrequent.

Dilatation is formidable in a somewhat different way from hypertrophy; it does not so directly act on the valvular disease, but it, as it were, aids this by the tendency it has itself to produce the like effects. Thus, for example, supposing that after an attack of endocarditis there has been sufficient mischief to cause some obstruction at the aortic orifice, and moderate insufficiency at the mitral; in a young, vigorous person the left ventricle becomes moderately hypertrophied to overcome this obstacle at the aorta, and, by so doing, it prevents any stagnation in the general circulation. It does harm, certainly, by increasing the mitral regurgitation, but then this, after all, is for a long time trifling; there is the auricle to bear the first shock of the reflux, and this cavity becoming dilated and hypertrophied, is as it were a safety valve between the ventricle and the lung. At length the mitral disease increases; but, comparatively, at a long distance of time. But suppose, on the other hand, that the ventricle in similar conditions, from some cause, perhaps want of nutrition, cannot become hypertrophied. Why then it cannot expel its blood through that narrowed aortic orifice, the blood collects, the ventricle yields; as it yields it becomes still less able to force on the blood; the systemic circulation becomes empty of blood; the blood collects behind the left ventricle, in the auricle, in the pulmonary arteries, and then calls into play the right heart, which also becomes dilated. Now, here mitral regurgitation may be trifling, as the weak heart may throw little blood back through the patent orifice, but pulmonary stagnation is greater than if the blood were forcibly driven back into the auricle by a large, hypertrophied, and strongly acting heart.

Therefore the practical point is, that (putting aside enormous hypertrophy) the prognosis in valvular lesions is unfavourable in proportion to the prevalence of dilatation rather than hypertrophy, and, in treating such cases, it is to be guarded against, that we do not increase the tendency to dilatation. This may be done by pushing sedatives to excess, and perhaps by lowering the system too much by general debilitating measures. The clinical signs of dilatation are drawn from the gradual weakening of the impulse, from increasing irregularity in the heart's action, and the alteration in the morbid sounds which the weakened heart necessitates.

In connexion with the subject of dilatation, I should wish to take up the question of the organic changes of the heart's fibres, of the deposit of oil globules within the sarcolemma, or, of the other forms of degeneration, which, as in the case I have just related, are distinct from fatty infiltration. But this subject must be deferred, as I must pass on to the second point, to which I alluded as connected with valvular lesions, and this is, as to the

cavities which are immediately affected by valvular lesions, whether this effect be hypertrophy or dilatation.

The rule here is perfectly simple, and, with a few provisos, is as certain as a physical law. It is this: The cavity which, in the course of the circulation, is anterior to the obstacle, is the one which is affected, if any be. For example, aortic obstruction, or regurgitation, (which, as far as the ventricle is concerned, is practically obstruction,) acts on the left ventricle; or, if there be no disease at this point, any condition of the aorta, or, as most frequently happens, of the general circulation, which acts as an obstructing cause, produces, according to the presence of other conditions, and according to its own amount, hypertrophy, or dilatation, or both, of the left ventricle.

Primary disease of the mitral orifice, again, leaves the ventricle untouched. The left auricle now suffers; and this whether the mitral orifice be contracted or patent. In the first case, the auricle suffers most; it also drives the blood back more forcibly on the lungs, and produces greater pulmonary congestion than in the case of mitral regurgitation.

On the right side of the heart, the causes of hypertrophy or dilatation of the ventricle, are to be found in the pulmonary artery at some part of its course; rarely at its origin, very frequently, indeed, in its smallest ramifications in the substance of the lung.

Tricuspid regurgitation would not, *à priori*, appear to give the requisite conditions for any effect on the ventricle; and I believe that, in the great majority of cases, the hypertrophy does precede the regurgitation. But possibly the order of sequence may be in some rare cases reversed, from causes with which we are not acquainted.

Tricuspid regurgitation affects the auricle, which is almost always dilated, and sometimes hypertrophied. In tricuspid contraction, as in the case we have seen, the auricle is of course even more affected.

You will perceive, then, that for ventricular hypertrophy and dilatation following obstruction, we look usually to the lungs as the cause of the disease of the right ventricle, and to the commencement of the aorta and to the general systemic circulation for the disease of the left ventricle. Now, as disease of one side tends to affect the pulmonary or the systemic circulation, as the case may be, it influences, through one or other circulation, the other side of the heart. Consequently, if all things were equal, we should never have valvular disease and hypertrophy of the one side, without being able to predicate the exact amount of disease which must ensue on the other side. But this foreknowledge is not possible, because, in every case, three important elements of the problem are liable to variation, viz., the valvular lesion itself, the force of the contractions of the affected side, and the supply of blood to both sides. Thus, mitral regurgitant, following hypertrophy, will not affect the pulmonary circulation sufficiently to cause hypertrophy of the right ventricle, if the left ventricle be not strong, and if the aorta be properly open, or if the mitral disease be trifling, &c. And so tricuspid regurgitation will not always produce hypertrophy of the left heart, if the left heart receive only a small quantity of blood in consequence of congested lungs or from other causes; for then the left heart throws it easily into the circulation, and experiences comparatively no obstacle.

Therefore, the elements of the problem, are, the vigour of the contraction of the hypertrophied cavity, the amount of blood which it can throw back, and the amount of blood which, from cardiac or other lesions, or constitutional conditions, can reach the non-affected side. But these things complicate the question so much, that as we cannot tell *à priori* whether hypertrophy or dilatation will follow an obstacle, neither, in the case of disease of one heart, can we tell *à priori* the degree to which the other will be affected. Actual clinical observation, in each particular case, is necessary to define the extent of the secondary disease.

I have alluded here merely to hypertrophies and dilatations secondary to obstacles in the circulation, among which are valvular lesions. But there are primitive hypertrophies and dilatations which depend on other and more obscure causes, and these, of course, we have not touched at all. We must hereafter attempt these most difficult points.

ORIGINAL CONTRIBUTIONS.

RESEARCHES ON INVOLUNTARY SEMINAL DISCHARGES, AND THE DISORDERS ATTENDING THEM.

By H. J. M'DOUGALL, Surgeon, Fellow of the Royal Medical and Chirurgical Society; formerly House-Surgeon to University College Hospital.

(Continued from Vol. XX., page 378.)

It is my intention, in the present paper, to consider the effects produced by spermatic discharges on the digestive organs. These vary much. At first, venereal excesses are often attended by increased appetite; the same may be said of masturbation; and this, probably, arises from the loss to the economy requiring increased material for its repair. But, if the excesses or masturbation be continued, after a longer or shorter time, according to the strength of the patient's digestive organs, the reduction of the food in the stomach becomes less easy. If, however, the disordering cause be now discontinued, this derangement may pass off, and the stomach may regain its tone. When involuntary discharges have been set up, however, this return to health does not take place. Under these circumstances, the patients, feeling depressed and debilitated, often endeavour to repair their strength by taking abundant and nutritious food, without feeling a real sense of hunger, but rather a sensation of gnawing and heat referred to the epigastric region, or of sinking in the stomach, and general faintness. This sensation of sinking in the stomach is a symptom very commonly complained of, and, for its relief, the stomach is frequently overloaded with stimulating and savoury food, and the meals are often repeated more frequently than is compatible with sound digestion. Alcoholic and other stimulants, such as strong tea and coffee, are also taken to assist digestion, and, although sometimes these afford temporary relief, they assist in laying the foundation for further and more serious disorders. This state of stomachic irritation re-acts on the involuntary seminal discharges, and renders them more frequent,—a result much encouraged by the stimulants taken in hope of relief. Under such circumstances, the patients lose the sense of comfort felt after food by healthy men, and experience a feeling of weight and oppression at the epigastrium, which causes uneasiness and restlessness; the pulse becomes accelerated, and the patient is often threatened with an attack of cerebral congestion, such as I have described in a previous paper. At a later period of digestion, he often becomes torpid and drowsy. Eructations of acid and burning taste now occur, with constant burning pain about the cardiac extremity of the stomach; and I have seen the matter spit up blaze like oil when expectorated into the fire. The chyme, badly reduced in the stomach, irritates the duodenum, and this irritation extends to the liver and pancreas by their respective ducts, disordering the functions of these important organs; the secretions of which, being deranged, again promote disorder in the jejunum and ilium, with disengagement of flatus, causing the sharp colicky pains of which such patients complain. To these symptoms are often added difficulty of breathing and palpitation of the heart; the former, the result of the abdominal distention; the latter sympathetic of the gastric disturbance. It will readily be understood, that such disorder in the functions of the small intestines is followed by derangement of the large; hence constipation is a pretty constant accompaniment of these cases. At first, perhaps, the bowels are alternately over-relaxed and constipated, but, after a short time, constipation becomes permanent, and the patient seldom obtains relief from his bowels without the use of purgative medicines. This state of constipation, which is of itself sufficient to bring on pollutions, as might be expected, aggravates the discharges. The patient remarks, that after his stools he invariably feels more depressed, although he is the victim of general uneasiness when the bowels are not relieved. He passes through various ordeals of treatment, both by the regular practitioner and the charlatan, and he tries the effects of all the quack medicines advertised for the cure of constipation, but without relief. In many of these cases, the patient's thoughts become so wrapped up in himself and his complaints, that it is difficult to make him converse on any other subject, especially if his companion be in any way connected with the Medical profession. The frequent use of drastic purgatives only increases his malady, and, by irritating the rectum, increases the disorder of the bladder, prostate, and urethra, until pollutions, which at first, perhaps, only occurred during active straining, now take place at every evacuation of the bowels, and even sometimes during the passage of flatus.

How is the disorder above described, as caused by spermatorrhœa, to be distinguished from chronic gastritis and gastro-enteritis? The origin and history of the complaint are here of great service to us in forming a diagnosis. Gastritis and gastro-enteritis are generally traceable to some exciting cause; and even in their most chronic forms, do not present the slow insidious progress of this complaint. Vomiting is generally present in gastritis; not so when the affection depends on spermatorrhœa. Diarrhœa accompanies enteritis, and the appearance of the stools is characteristic; but constipation is, in advanced cases, an almost invariable attendant of the disorder caused by spermatorrhœa. The appearance of the tongue, too, is characteristic. Instead of the red irritable tongue present in gastritis, we have here a voluminous pale tongue, covered, in the morning, with a thick yellowish white fur, and attended by a very disagreeable taste in the mouth.

The state of the sexual powers is also an important point in determining the diagnosis. When matters have reached the condition I have described, the sexual energy will always be found more or less diminished, sometimes even to complete impotence, with occasional periods of partial vigour. Inquiry on this point should never be neglected.

What is the state of nutrition of these patients? Hippocrates observed, that they "eat well; but, notwithstanding, they lose flesh." This is, no doubt, true in advanced cases of the malady; but is by no means the case in its earlier stages. Such persons are often considerably inclined to *embonpoint*, and have every appearance of health and vigour. Hence their friends endeavour to rouse them by society, and often urge on them the necessity of marrying. Their complaints are often set down as imaginary, or the result of the regimen they pursue. They are advised not to "take so much physic," and to amuse or employ themselves. The patients themselves often regret their healthy appearance, saying, that if they were thin, pale, and yellow, they would, at least, receive sympathy, and not be importuned to undertake what they feel themselves unable to perform. Marriage is, in the majority of cases, out of the question, where involuntary discharges have attained any frequency, or after diurnal pollutions have commenced. Numerous cases, in which the advice "to marry," so commonly given, has been followed, have come under my notice. Much domestic unhappiness is, as might be expected, the result; and the husband has either to submit to treatment which might have been previously employed with much better chance of success, or to feel the consciousness of having greatly, though unintentionally, deceived a person who trusted her happiness to his care.

When, however, the diurnal pollutions have been some years established, and the digestive disorder is of old standing, the description of Hippocrates is applicable. The patients certainly "lose flesh," and they also present a peculiarly haggard and jaded appearance. They appear in the morning unrefreshed, and as though they had not been in bed all night. The eyes become sunken, and surrounded by dark circles, and the breath is often very offensive. Such patients have, by the older writers, been said to waste, especially in the region of the loins, and the inside of the thighs. My experience does not confirm this assertion, and M. Lallemand considers that the special wasting of these parts is not greater in this than in other diseases.

I need not occupy the valuable space of the *Medical Times* by relating cases illustrative of the condition of the digestive organs which I have described above. Every Practitioner of experience will find such among his own patients; and I trust, that many cases, which have hitherto been considered anomalous, may, on further investigation, prove such as I have above described, and, therefore, remediable under proper treatment.

In my next paper I hope to conclude the first division of my subject, viz., "the general symptoms, or, rather, the effects of spermatorrhœa;" after which I shall proceed to consider the local symptoms of this disorder.

ON THE USE OF CHLOROFORM.

By EDWARD RIGBY, M.D., &c.; Senior Physician to the General Lying-in Hospital; Examiner in Midwifery in the University of London.

It is now more than two years ago since I troubled you with a few observations on the use of chloroform in midwifery; and, having had since then tolerably frequent opportunities of watching its effects, I venture to offer to your notice a few more remarks on the same subject.

During the short period in which ether was used as an anæsthetic agent, I never could entirely approve of the plan of throwing a patient into that state of purple suffusion and stertorous insensibility verging upon coma, which I had seen produced in surgical operations: and, although these to me objectionable effects, were, perhaps, less strongly marked in those operations which were afterwards performed under the use of chloroform, still I could not help thinking that it would be highly desirable to avoid producing them, if we could obtain a sufficient amount of anæsthetic influence without them.

My object was to use the smallest possible quantity of chloroform, so that a slight further diminution, or very brief intermission of its application, would restore the patient's power of sensation, while, at the same time, she never entirely lost consciousness when under its influence. I found that, to produce these effects required a much smaller quantity of chloroform than is commonly used, and the patient, although insensible to pain, was fully aware of all that was going on.

In cases of labour, I have endeavoured to follow the same rule of administering chloroform, and find that the quantity absolutely required to allay pain is far less than what is usually given; and that, instead of using a drachm or more at a time, a few drops are quite enough to render the patient sufficiently insensible to pain without impairing her consciousness.

Instead of using a pocket-handkerchief, or an inhaler, I have found that a small strip of sponge, about two inches and a half long and one broad, placed under the upper lip, close under the nostrils, was quite sufficient for the purpose; and, instead of *soaking* it with chloroform, I have pressed it tightly with my thumb over the mouth of the bottle, which I, for a moment, inverted,—and, from the rate at which I consume the chloroform in this way, I cannot well use more than from ten to fifteen drops at a time.

At first, the sponge requires to be re-charged pretty frequently; but, in a short time, a state of sleepy quiescence is established, which is generally described by the patient as being highly agreeable: she is perfectly conscious, although strongly inclined to sleep, and makes her remarks on conversation which may be going on around her, and usually announces when pain comes on, expressing her surprise that she should know she has a pain and yet not feel it.

When administered in this manner I think that the expulsive pains of the last stage are not so retarded as they are when large quantities are given. I own that this is not a constant effect, and varies considerably in different patients; but there can be no doubt that the less her consciousness is impaired the more powerful will be the voluntary straining efforts which she makes. Thus, where the head has been approaching, or even pressing on the perineum, and the intervals between the pains have been very long, I have suspended the action of the chloroform, more or less, for a few minutes; she has had one or two smart pains, which she has assisted with all her strength, and effected such an advance of the head that a few more pains completed the labour, even although I had afterwards resumed the use of the chloroform, and that, generally, to a greater extent just at the last than during the earlier part of the process.

As far as I have observed, it is during the last or expelling stage that chloroform appears to delay the pains, or rather to increase the interval between them, and this probably arises from the fact of their being a combination of partly voluntary and partly involuntary effort. It is well known that the pains of this stage not only consist of the uterine contractions, but also of the partly voluntary, partly involuntary efforts of the abdominal muscles which at this period of labour assist the uterus in the process of expulsion. The moment the head has entered the vagina the peculiar straining pains commence; for, as I have elsewhere shown, there is the same consent between the distended vagina and the abdominal muscles, as there is between them and the rectum, and pressure or distension of either canal excites straining efforts, which are not entirely under the patient's control—more so when it is slight, less so when severe. The accession of a uterine contraction, therefore rouses the patient to powerful and nearly involuntary efforts; and so long as she is conscious, there is little doubt but the irritable state in which the abdominal muscles now are, excites her voluntarily to renew those efforts even without the presence and assistance of a uterine contraction. Hence, therefore, when *thoroughly* under the influence of chloroform, or, in other words, quite insensible, the voluntary part of these efforts must be considerably impaired or nearly suspended, and not only shall we have them made less frequently, but, even when they do come, they will not be so effective as they would have been, had she possessed a sufficient amount of consciousness to assist herself.

Let me not be understood to assert, that there are no straining efforts when the patient is insensible. I simply conteud, that they are neither so frequent nor so effective.

One great advantage in using these small doses of chloroform, is the being able to suspend its effects so quickly in case any unforeseen circumstance should occur which would render this desirable. The patient is able to swallow anything with perfect safety, and this is sometimes of considerable importance in cases of hæmorrhage after the birth of the child. The chief object, therefore, in offering you these observations on the use of chloroform in midwifery, is to point out a rule for its administration, which I conceive is a useful one, viz., that we should, as far as possible, "*draw the line between allaying pain, and destroying consciousness.*"

I am well aware that this agent acts very differently on different individuals; that some are very susceptible of its effects, others the reverse; that some are quiet under its influence; others excited, and even noisy; but, in private practice, where a patient has been little accustomed to stimuli, it acts readily and gently, it enables one, with perfect ease and certainty, to produce those moderate effects which I have been endeavouring to show are so desirable.

HOSPITAL REPORTS.

LONDON HOSPITAL.

LACERATION OF THE HAND.—ENLARGEMENT OF THE METACARPAL BONES.

Henry Carter, aged 18, short, with light hair, dark eyes, and of a fair, clear complexion, and though being evidently of a strumous diathesis, had enjoyed tolerably good health, not having at any time suffered from symptoms of a scrofulous character, became an out-patient under Mr. Ward, August 16, 1849, in consequence of a lacerated hand, which he had received by the falling of the topmast, whilst engaged in his occupation as a sailor.

On his application his hand was much contused, and on its palmar aspect was a cutaneous laceration extending along the first phalanx of the middle finger.

Water dressing was applied for a few days, but as the hand and fingers became much swollen, and the wound somewhat unhealthy, the water dressing was discontinued and the whole hand enveloped in an oatmeal poultice. Under this treatment the swelling diminished and the wound assumed a healthy character, so that by the end of a fortnight from the receipt of the accident, it was strapped in the usual manner, and, by the 7th of September, was entirely healed. Considerable stiffness of the whole of the fingers remained, so that they could be but half closed, whilst the boy complained of soreness along them, and also over the whole of the metacarpal bones, and which was somewhat increased by moving them, but no perceptible enlargement was noticed. Linimentum saponis was ordered.

At the end of a fortnight the soreness and stiffness had diminished, but, on his next application, (October 8,) both symptoms had become considerably increased, so that little motion could be obtained, whilst the attempt to move them was attended with an increase of the pain.

The entire hand appeared larger than the other, and its temperature was slightly augmented; the whole of the metacarpal bones had become enlarged to nearly twice their natural size, and the first phalanges, at their articulation with the former, were in a similar state.

Mr. Ward ordered the hand to be dressed with the ceratum hydrarg. co. spread on lint, and strapping, and to be kept perfectly at rest, to ensure which a splint was applied.

To take ol. jecoris. aselli, ʒi.; tinct. iodinii, miij. ter die.

Under this treatment the boy's health improved; he felt stronger, and became much stouter; the enlargement of the metacarpal bones gradually subsided, while the power of flexion was correspondingly increased.

The cerat. hydrarg. co. was renewed at intervals of a fortnight till the end of December, when it was discontinued; the enlargement having entirely disappeared.

Since that time the extent of the movement has gradually increased, and on the 12th of this month the patient was discharged, being then able to bend his fingers, so as as to bring them within one-third of an inch of the palm.

SPRAINED WRIST—ENLARGEMENT OF THE ULNA AND FIFTH METACARPAL BONE WITH ABSCESSES OVER THEM.

Solomon Jacob, aged 20, with dark hair and sallow complexion, became an out-patient under the care of Mr. Ward, having sprained his right wrist. There was considerable fullness about the articulation, accompanied with much pain on movement of the hand, or on slight pressure being made upon it.

Six leeches were applied, and subsequently a poultice, the forearm and the hand being bound up lightly in a splint.

On the subsidence of the inflammation of the wrist joint under similar treatment pursued for about a week, he complained of great pain over the fifth metacarpal bone, and the extremity of the ulna, which on examination were found very tender to the touch, and somewhat enlarged. The formation of abscesses over them supervened at two distinct periods, that over the metacarpal bone appearing about a fortnight subsequent to that over the ulna.

On the subsidence of acute symptoms the ceratum hydrargyri co. was applied on flannel every morning, over the seat of the abscesses, and cod-liver oil and a generous diet prescribed.

In a few weeks the abscesses had become absorbed,—that over the metacarpal bone having disappeared first. Enlargement of the bones now only remaining, the same local and constitutional treatment was persisted in; and about two months after his application at the Hospital the affected bones had assumed their natural condition, the hand and forearm were taken out of the splint, and in a short time the patient had perfect use of his hand.

In making some remarks on the preceding cases, Mr. Ward gave the particulars of the two following: the first of which had occurred to him in private practice, and the second in the Hospital under the late Mr. Scott.

A girl, about seven years old, of a remarkably strumous habit, was brought to him, having, whilst

skipping, strained her left thumb. Before he saw the case the injury had been treated as a simple sprain, and liniments had been rubbed into it.

An abscess soon formed over the metacarpal bone, and, giving rise to much pain and tension, was opened. The resulting sinus showed no tendency to heal, and, at the end of ten months after the injury, two pieces of bone, having become partially detached, were removed from the dorsum of the first phalanx by a free incision. The bone, at this time, was much enlarged, and softer than natural in the centre, as evidenced by the impression communicated through the probe in endeavouring to detect more necrosed portions.

The wound, resulting from the removal of the pieces of bone, did not heal for two years after the original injury, no more bone, however, having come away. The local and general treatment in this instance were in every way similar to that adopted in the previous cases. The limb all along was carefully confined in a splint, and on the subsidence of the acute symptoms, cerat. hyd. co. and strapping were applied once or twice a week, as circumstances directed. Iodide of potassium in combination with the ammoniated citrate of iron, and cod-liver oil, were alternately had recourse to, and, latterly, six weeks in the country materially aided the progress towards recovery.

ACUTE SYNOVITIS OF THE WRIST JOINT, TERMINATING IN SEPARATION OF THE EXTREMITY OF THE ULNA, AND ANCHYLOSIS.

William Barber, aged 19, a bricklayer, of strumous habit, was admitted into the London Hospital with erysipelatous inflammation and great pain of the right hand and forearm.

He stated that, three days prior to the inflammation of the upper extremity, he felt intense pain in the wrist without any assignable cause; great swelling of the articulation almost immediately supervened, and terminated in erysipelas of the whole upper extremity. The arm was freely scarified, and placed in a warm bath, and subsequently warm water dressing was applied.

On the subsidence of the erysipelas, an abscess formed around the joint, and was opened, with great relief to the severe pain, which had continued with but little diminution since the period of his admission. The limb was placed on an inclined plane, the hand and forearm being lightly bound to a splint, and generous diet, with bark and acid, were exhibited.

At the end of four months, several small pieces of bone came away, followed in a short time by the lower end of the ulna.

From this date the discharge gradually diminished, and the opening became much contracted, the joint stiff, and the fingers perfectly rigid. He became an out-patient, and at the end of a year the wound had become perfectly closed.

By passive movement, the fingers gradually recovered their use, so that, in two or three months more, he could flex them to within an inch of the palm. He had, however, no power of extending the thumb or little finger. Two years after the original attack of inflammation, he called on Mr. Ward with a small abscess over the ulna, apparently connected with the periosteum, which became absorbed after a little counter-irritation and rest of the limb.

He stated that he could detect no difference in the useful powers of the two hands, being capable of lifting as heavy a weight with the right hand as with the left, the original affection not interfering in any way with his ordinary occupations. The hand was perfectly in a straight line with the forearm, and a depressed cicatrix existed, indicating the point at which the ulna had come away.

Remarks.—Mr. Ward observed, that the above cases, although possessing but little of individual interest, were of the highest practical importance, as being of a class which not unfrequently came under the care of the surgeon, and which, unless sedulously attended to, were prone to be followed by very serious results. The modification of the effect of the local injury by the peculiarity of the constitution was the chief point on which rested their claim to attention.

In the four instances above detailed, the disparity between the injury and the secondary symptoms was very remarkable. In the first, a mere laceration of the hand was sufficient to bring about subacute inflammation of the metacarpus; in the second, disease of the ulna and metacarpal bones followed a mere sprain; in the third, death of bone resulted from a similar cause; and in the fourth, the extremity of the ulna came away, and was followed by complete anchylosis of the wrist joint, from an attack resembling acute rheumatic synovitis. Had similar injuries occurred in healthy individuals, the result would, in all probability, have been slight in amount, and unimportant in its consequences.

In these cases, however, the secondary result assimilated itself, as it were, to the form of disease of which the constitution was the type, and would no doubt have been of a most serious character, had not the utmost attention been paid to keeping the limbs as quiet as possible, and to the improvement of the general state of health.

These cases further pointed out, that the osseous system in strumous habits being peculiarly liable to diseased action, easily induced by direct or indirect topical injury, even when very slight in its degree, the great necessity of caution in mechanical interference. We should not unnecessarily probe the wound in search of diseased bone, a proceeding he had seen occasionally bring about the very condition it was indirectly intended to remedy. The probe, if used at all, should be employed with extreme delicacy; and operations for the removal of necrosed bone should not be had recourse to before full evidence had been obtained that the dead portions were loose, and capable of easy removal.

The long persistence of sinuses connected with the diseased bone, moreover, did not necessarily depend on the presence of sequestra, but very frequently on a subacute inflammatory condition of the entire shaft, or a portion of it. In the treatment of the last case detailed, the probe was not once had recourse to, and to that circumstance, Mr. Ward mainly attributed the very favourable termination of it. In the third case, notwithstanding the removal of the dead bone, the sinus did not close for a year; and it was only when the metacarpal bone had subsided to its original dimensions, on the cessation of the inflammatory action which gave rise to it, that a cicatrix resulted.

KING'S COLLEGE HOSPITAL.

On Saturday, Feb. 16, a series of operations were performed. The first, and not the least interesting case brought under notice was a patient of Mr. Bowman's. A middle-aged woman had suffered for about five years with

MAMMARY ENLARGEMENT.

It had commenced as a small swelling, remaining passive for some years, giving her but little uneasiness until about three months ago, when she complained of great pain in the tumour, now of considerable size. The swelling presented the features of sero-cystic disease. Fluctuation was perceptible in the most prominent portion; there were no signs whatever of any malignancy in it; and, as the patient was anxious to have it removed, Mr. Bowman, prior to performing the operation, made an exploratory puncture, and ascertained the presence of some fluid. There was no retraction of the nipple whatever, and no adhesion of the tumour to the skin. The whole of the morbid mass was carefully removed by Mr. Bowman. It was discovered to be a very fair specimen of cystic sarcoma of the mamma.

FORMATION OF A NEW NOSE.

The next operation, performed by Mr. Fergusson, was one which is now not very frequently seen, although numerous operations of this nature have been performed by English surgeons. The proceeding consisted in making a new nose for a man who some years ago had received a severe injury, in consequence of which inflammation and necrosis had taken place, and the greater portion of that useful member was lost. The alæ remained; but, from the circumstance of the bridge of the nose being destroyed, they were depressed almost on a level with the face. The operation was conducted in the following manner. A piece of leather was first cut out, which corresponded with the flap of skin which was to be dissected from the forehead, and also with the line of incisions in the nose. The patient being laid on his back, and Mr. Fergusson standing behind, an incision was carried from the tip of the old nose, on each side, nearly as far as the root, and the alæ effectually separated. The triangular piece of leather was then placed on the forehead, and a corresponding flap of integument was dissected up sufficient to make ample covering; it was left narrowly attached between the eyebrows, was then twisted round, and by this means the cut surface of the latter was placed in apposition with the edges of the former incision, and its edges on each side brought closely into apposition with those of the divided alæ by means of sutures, and thus an ample covering was allowed, which promises a very fair substitute for the original organ. There was necessarily a considerable amount of bleeding, but this was checked by exposure to the air, and by one or two ligatures.

ENCHONDROMA OF THE FINGERS.

The next operation was the removal of the two middle fingers, with the corresponding metacarpal bones, from a poor woman who had suffered for a long time with some very painful tumours on the dorsal and palmar aspect of the hand. She had suffered so much pain, and had so entirely lost the use of her hand, that she was anxious to have it removed; but as Mr. Fergusson considered that the disease only involved two fingers, he was anxious to save as many fingers as possible. The two fingers, therefore, with the metacarpal bones, were removed by the ordinary incisions; and on looking at the diseased portions afterwards, it was found that the two tumours were firmly connected with the bones, and consisted of that fibro-cartilaginous material known as enchondroma. Specimens of this disease are somewhat rare, and these, as Mr. Fergusson remarked, were very well-marked instances of it.

CLUB FOOT.

Several operations were performed, on Saturday, Feb. 23, by Mr. Fergusson. The first was a case of division of the tendo achillis in a young lad who suffered from club foot, accompanied with very great distortion of the ankle. Preparatory to other measures for restoring the limb to its natural condition, Mr. Fergusson determined to divide the tendo achillis, which he did in the usual manner.

CANCER OF LIP.

A case of cancer of the lower lip, in an old woman, presented a somewhat unusual appearance, inasmuch as the disease, which consisted of a large circumscribed tubercle, was situated exactly in the centre of the lip. This disease attacking the lips, is generally marked by these circumstances:—In the first place, it nearly always is found to be seated on the lower lip,—very rarely the upper; and it is for the most part placed on one side of the central line, very frequently at the commissure. It is much more favourable, of course, for operation, when, as in this case, it is seated in the centre, as the whole can easily be included in the incisions, and there will be less deformity afterwards. Mr. Fergusson performed the operation by transfixing the lip below and cutting upwards; and then, by another incision, removing the morbid mass, leaving a wound of a V shape, the edges of which were brought accurately together by hare-lip pins and sutures.

RHINOPLASTIC OPERATION IN ARTIFICIAL ANUS.

A patient was now brought into the theatre, who excited a considerable amount of curiosity and interest, from various causes. It will be in the recollection of the readers of the *Medical Times*, that a report of an operation, to remedy an extraordinary and rare instance of artificial anus was made; it will be found in the Number for August 4, 1849. This poor boy was now again brought forward, in order that further steps for his cure might be undertaken. We shall again run over the history of this remarkable, and, we may truly say, (as far as our own observation, both in practice and in reading, has informed us,) unprecedented case. It appears that, several years ago, the boy had disease of the right hip-joint, which, having gone through its various stages of ulceration, suppuration, and destruction of part of the joint, had ultimately ended in a perfect cure by anchylosis. Whilst the disease was

progressing, the pelvis became deeply implicated, the rectum involved and ulcerated, and an opening in connexion with the gut formed between the back part of the ilium and sacrum,—most probably, this latter bone had been perforated, or partially destroyed, as well as the great sacro-sciatic ligament. The consequence was an immense chasm on the back part of the buttock, of nearly three inches in length, and from one-half to three-fourths of an inch in breadth, through which the *whole* of the fæces came away,—of course rendering this poor sufferer a misery to himself, and a burthen to every one around him. This state of things had existed for four years, no fæcal matter having passed *per anum*, when the boy was first brought under the notice of Mr. Fergusson in the summer of last year. Although there appeared but little hope for any measure producing benefit, yet Mr. Fergusson determined to attempt the amelioration of the case; and, as we stated in a former report, an operation was devised for the purpose of closing a portion of the opening. The effect of this was not so great as one could wish; yet the opening was somewhat more contracted when, in November last, Mr. Fergusson again pared the edges of a part of the opening, and brought them into contact. The boy remained in the hospital for some weeks, went to the country, and was again admitted a few days ago, when the great amount of benefit which the operation of Mr. Fergusson had produced was very apparent. The opening had united to quite one-half of its extent, by a firm and healthy union; a portion at each extremity still remaining patent. The openings, however, between the edges being very narrow. But the most pleasing and inspiriting circumstance connected with this amelioration was, that as much of the fæces came away by the natural passage, as by the artificial opening, whereas none had come away per anum before for more than four years. Under such encouraging circumstances, then, Mr. Fergusson determined to perform a further operation. The lower opening was operated on, its edges were carefully dissected up, and a cross incision made on each side; they were then pared and accurately brought into apposition by means of needles and twisted suture; the upper opening was left untouched for the present.

The operation being concluded, Mr. Fergusson took the occasion to make some lengthened remarks on this case, which, to all who have seen it, is a most interesting one, both from the peculiar nature and cause of the affection, and from the great benefit which has already arisen from surgical interference. However, there is another cause which has rendered this case peculiarly interesting in the eyes of London surgeons, and that in consequence of an article that occurs in the February number of the *Edinburgh Monthly Journal of Medical Science*. It appears, that the individual who writes the surgical articles in that Journal, most probably because there is a lack of cases in his own city to talk about, and also for the purpose, we suspect, of indulging a little feeling of spleen, has taken the opportunity, by selecting this case, and another which Mr. Fergusson operated on, to accuse that gentleman of a departure from established surgical principles, and to condemn, and even attempt to ridicule, the operative interference which was here used. This anonymous detractor, not stepping forward boldly like a man, and putting his name to his remarks, has based the main point of his criticism upon an assumption, which is ridiculously incorrect; for he informs his readers that, "as the matter proceeded from diseased bone," it was very wrong, to use his refined expression, to "cork the opening up." Now, the fact is, that there never has been any matter at all flowing from the opening since the patient has been under Mr. Fergusson's care—unless the escape of fæces may be termed a discharge of matter—nor have there been any appearances or signs of diseased bone remaining since the patient has been in Hospital. There had been at one time diseased bone; but this morbid action had long ago ceased, and all that remained was simply an *artificial anus* of a very interesting and peculiar character—nothing more, nothing less—with "no discharge of purulent matter," and "no diseased bone," as the "seer" of the North would wish us to believe.

Mr. Fergusson took the occasion to call the attention of those around to this ingenious attack upon his plan of treatment, which he read aloud, to the great amusement of the numerous pupils and surgeons, who had before their eyes the best evidence of the propriety of the treatment pursued. Those who pretend to criticise practice, should take a little more trouble to assure themselves of correct facts at least, and not distort them just as it might suit their own purposes.

For our own part, we are fully sensible of the great benefit which has already accrued to this poor youth by Mr. Fergusson's humane attempts to relieve his miseries; and we shall carefully watch the progress of the case.

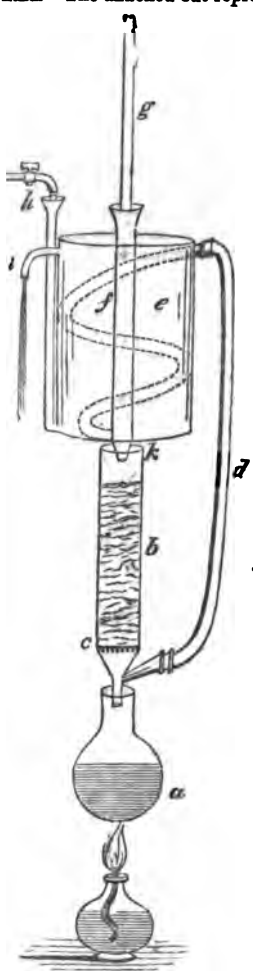
PROGRESS OF MEDICAL SCIENCE.

FRANCE.

[From our Paris Correspondent.]

NEW APPARATUS FOR CONTINUED DISTILLATION.

M. Kopp, of Strasbourg, whose ingenious continued syphon was exhibited at the last National Exhibition, has proposed an useful apparatus for the constant distillation of substances with ether, alcohol, or water. When once this apparatus has been regulated, it requires little or no care, and is more easily managed than any other of a similar kind. The annexed cut represents it.



a is a glass crucible, heated by a spirit lamp; *b*, a metal cylinder holding the substance on which the extractive fluid is to act. At the lower part is a transverse plate *c*, pierced with holes, which prevents the substance from falling down into the crucible. Below this plate is a short tube, to which a cork is fitted, and this latter supports a leaden tube *d*, which establishes a communication between the cylinder and the condensor, *e*. This tube ought to be sufficiently large to let the vapour pass easily through it. *e* is the condensor, and is traversed by a metal tube, *f*, which communicates with the reservoir *b*; from its superior extremity ascends a long glass tube, *g*, which enables us to ascertain whether all the vapours are condensed in the refrigerator. This latter is cooled with water, admitted through the tube *h*, and which escapes, when heated, through an opening at *i*.

The mode of using the apparatus is readily understood. The cylinder is nearly filled with the leaves, roots, &c., on which we intend operating. They are previously reduced to a coarse powder. A small piece of cotton, treated with boiling caustic potash, and afterwards washed and dried is, however, first placed on the transverse plate; and some common cotton at the top of the powder. The cylinder is next fixed by means of a cork to the tube *f*, above and to the crucible below, which is three-fourths filled with ether, alcohol, or whatever fluid is intended to be used for extraction. The leaden tube *d* is next fixed with corks; the condensor filled with water, and arrangements made to renew the cold water through the tube *h*. The crucible is now cautiously heated, and as the vapours cannot pass readily through the perforated plate at *c*, they ascend through the metal tube *d*, are condensed in the worm, whence they pass into the tube *g*, and from this latter, into the cylinder, at *h*.

This apparatus is very useful for the analysis of substances containing active principles.

ANATOMICAL CAPILLARY INJECTIONS.

M. Hirschfeld, a young anatomist, who made nearly all the preparations whence the great work of Bourgery was drawn, and likewise the beautiful preparations at the Museum of the Faculty, has recently published an account of the way in which he prepares his injections. For very fine, microscopic injections, Berres and his pupil recommend the following:—Take some copal varnish, and add a sixth of its weight of mastic, melted in a sand-bath, with some spirits of turpentine. These are mixed together until they have acquired the proper consistence, which may be judged of by dropping them on a flat stone, and watching how they set. If, in cooling, the drop preserves the consistency of a drop of honey, it is of the proper thickness.

M. Hyrtt recommends the following:—Take of the purest and whitest virgin wax and Canada or Venice turpentine equal parts; dissolve them in a sand-bath, and then test the consistency according to the method of Berres. If too thin, add wax, and *vice versâ*.

For colouring matters, Chinese vermillion is the best. It is carefully ground with the spirits of turpentine, and the mixture is then filtered; after which it is heated again, care being taken not to produce any air-bubbles; the syringe is also heated, and the injection used. As soon as it is thrown in, the preparation must be placed in cold water, to coagulate the injection.

The beautiful injections of M. Lignerolles in the Museum were made with an alcoholic solution of gum-lac; and those of M. Guillot with coloured gelatine; but this latter is not unattended with inconveniences.

The splendid injections of Malpighi, it is well known, were made with common ink; but this, and all aqueous injections, are very liable to become extravasated from their fluidity.

As for the processes peculiar to M. Hirschfeld, they are as follow:—He chooses, if possible, a young subject, and warms it in a bath for eight or ten hours, and then throws in his injection. This is composed, for the arteries, of one quart of oil with one pound and a-half of vermillion, carefully ground together and warmed; for the veins, two quarts of linseed oil, and one pound of white lead, or enough of indigo to give a good blue. When it is desirable to pass the injection into the very finest capillaries, M. Hirschfeld adds a certain quantity of turpentine to it, which prevents it from running out through the divided vessels. A couple of teaspoonsful of soft Venice turpentine to each injection will be enough to make it set perfectly. The microscopic injections thus made by several pupils of the French school, and preserved in the Museum of the Faculty, do not yield, either for beauty or accuracy, to the famous productions of the German anatomists.

AN "IRRELIGIOUS" MALADY.

Our nosological scale has been recently augmented by a class of disorders hitherto unknown to the uninitiated; but which threatens, like the lean kine of Egypt, to swallow up all the rest. The discovery we owe to the very reverend Jesuits into whose hands the destinies of this country have now fallen. These worthies, desirous of signalizing their advent to power, by startling improvement in every branch of civilized knowledge, have established a new class of diseases under the title of *irreligious!!!* and, what is worse, have reduced their inhuman theory to practice.

Last week, Ricord had occasion to require an artificial palate for one of his patients at the Lock Hospital; he therefore gave an order to the Director of the Hospital, who referred, in his turn, to the General Committee; the answer was, "*that no remedies could be supplied to sinners labouring under irreligious disorders.*"

It will hardly be believed that such a thing could have occurred in the middle of the 19th century, and in the heart of civilized Europe, amongst a people who, with all their failings, have hitherto been free from the weakness of blind submission to priestcraft. Yet the above is a fact; and we may, perchance, have to congratulate ourselves, that the "reverend fathers" have not extended their theory to the whole range of human disease, and annihilated our occupation by a stroke of the pen. For under such a theory, and with their elastic consciences, it is impossible to foresee what disorder may not be comprehended under the class "irreligious." One may catch a cough on coming out of a theatre, break his leg in a ball-room, fall in a fit at a card table, &c., when their reverences would exclaim, "*fenum habet in cornu;*" avoid him—let him rot and die in his iniquity—he has an *irreligious* disease. Fortunately absurdities of this kind bring their own remedy with them; and though the one now mentioned may be tolerated for a while, it will only hasten the downfal of those who have permitted its perpetration. The old proverb, about a rope at one end and a rogue at the other, has always been applicable to the Jesuits, in spite of their immense tact.

NOVEL MODE OF AMPUTATING.

Apropos of the Venereal Hospital, I may mention that M. Ricord performed an operation there, last week, which brings to mind strongly the practice of our forefathers during the infancy of the art. Indeed, his operation seems to be embryonic rather than infantile; that is to say, he has gone back a period beyond that of infancy. The older surgeons, as you know, used to arrest hæmorrhage by the actual cautery, not having arrived at the grand discovery of the ligature; but I do not remember to have read that they used to amputate with the cautery; that is, burn off members. Ricord, however, amputated the penis with the usual cautery,—if I may use the expression,—in a case of phagedænic ulceration which nothing could arrest. He used a short, thick, blunt kind of a knife, heated to a white heat, and with this removed the organ close to the penis. It gave way like a piece of cheese, and the patient did not seem to suffer any pain. The case, I understand, is proceeding favourably. In another case,—one of

OBSTINATE IRRITABILITY OF THE BLADDER,

—M. Ricord employed what we might almost call the potential cautery, for he injected into the bladder an ounce of nitrate of silver dissolved in an ounce of water. The injection was not allowed to remain for more than twenty seconds in the bladder, and had the effect of completely removing the irritable condition of the mucous membrane.

TREATMENT OF ANEURISM BY ELECTRO-PUNCTURE.

M. Petrequin, Professor at the School of Medicine, Lyons, read a memoir on this subject at the last meeting of the Institut. Alluding to the operation of electro-puncture, the Author remarks, that the remedial agent employed requires to be studied in a more careful way than has hitherto been done, because the action of electricity, which is perfectly simple with respect to the physical world, is far from being simple when applied to the living body. M. Petrequin has, therefore, examined the effects of electricity in a searching manner, and concludes that the pile exercises three distinct influences on the system:—

1. The electric fluid may shake the whole nervous system, debilitate the patient, and communicate very severe or painful shocks. This is called the *electric* action.

2. It may have a *calorific* action, burning the living tissues, and destroying them more or less extensively, according to the intensity of the shock.

3. Finally, it has a *decomposing* action, separating the elementary molecules, and precipitating them under various forms.

Now, the latter action is the only one that can be turned to account in the treatment of aneurism, and hence the surgeons object should be to increase it, while he diminishes the two former. The electric action of the pile is diminished when the instrument is made to function without a multiplier or sparks; when the current is constant, and transmitted through isolating conductors. The calorific action is diminished by multiplying the elements in extent and surface; by reducing the discs to their smallest dimensions, and employing isolated conductors. The decomposing force is directly proportionate to the number of elements employed. From these brief principles we can readily deduce the scientific formula for the use of electro-puncture. It is this — multiply the elements; diminish their surface, and transmit a constant current through isolating conductors. From the above it is evident that we must no longer confound electro-puncture and galvano-puncture together. Electrical machines, and the various apparatus employed with so much advantage in the treatment of nervous and paralytic disorders become useless when our object is to coagulate the blood. Here we must address ourselves to the *decomposing* action of the pile; and, to render this more efficacious, M. Petrequin envelopes his conducting-needles with a layer of isolating varnish. This not only prevents the loss of the galvanic fluid, but also the inflammation and gangrene of the soft parts traversed by the needles. The latter, also, have spiral heads, which enable the operator to fix the wires to them more readily, and thus keep up the constant current, which is so important an element of success. Another point of importance is, to change the direction of the currents, without altering their nature. They must be made to traverse the mass of blood in every direction, so as to produce a multitude of filamentous concretions, which serve as the basis of the general coagulum; and, when the operation has been properly conducted, from twelve to twenty minutes are usually sufficient for the purpose.

MEANS OF ASCERTAINING THE QUANTITY AND QUALITY OF THE MILK IN WOMEN.

Everybody will tell you that plenty of good breast-milk is an essential requisite for the health of your infant; but when you come to ask Practitioners what "good milk" is, they are woefully puzzled to give a satisfactory answer. Dr. Donné, before he became a Government officer, made an attempt to resolve the question with the microscope; but his discovery,—like, indeed, to his sixty-two other discoveries, which have been sleeping for the last ten years, in sealed packets, at the Institut,—turned out mere smoke. M. Lamperierre, of Versailles, has not been discouraged by the failure of his predecessors, or the difficulty of the subject. Whether *he* has succeeded is another question; but his ingenious attempts are, at all events, worthy of record. To ascertain the quantity of milk secreted in a given time, M. Lamperierre has actually made a little Indian-rubber infant, or, rather, the mouth of one, which sucks in a very respectable manner, and evacuates its contents into a glass bottle. With this apparatus he examined the breasts of a great many nurses, and concludes that the average quantity of milk secreted should amount to 50 or 60 *grammes*, (12½ to 15 drachms,) every two hours, for each breast.

To ascertain the quality of the milk, the Author (for his Memoir has had the honour of the Institut) employs the following mode of analysis:—Having extracted, by means of his Indian-rubber mouth-piece, all the milk contained in one breast, he tests its specific gravity with the lactometer of Quevenne. The milk is first carefully measured, and then brought to the temperature of the surrounding air. It is then poured on a common filter, and in about a quarter or half an hour enough of serum is obtained to test the density of this latter fluid. Now, it is on the differences of density between the milk and its serum that the author founds his theory, each degree of density in the serum beyond the normal standard corresponding in a marked manner to the richness of the milk in butter. The author has constantly found the milk alkaline. In more than one hundred experiments he never found a single example of acid milk. At the

ACADEMY OF MEDICINE,

nothing of much importance has been brought forward during the last two meetings. M. Leblanc, a veterinary surgeon, read a curious case of true diabetes mellitus, which occurred in a dog, seven years old. The animal had never taken any other food than raw bullock's flesh.

THE CHLOROSIS OF PREGNANT WOMEN.

M. Cazeaux, a rising accoucheur here, whose private lectures are followed by a large class, read a memoir on this subject before the Academy. Nothing is more familiar to Practitioners than the series of phenomena, consisting in palpitations, giddiness, headache, suffocation, &c., which present themselves in pregnant woman about the fifth or sixth month, and which, being generally attributed to plethora, are as generally met by bleeding and purgatives. M. Cazeaux is of opinion that the accidents now alluded to depend, not on plethora, but on a very opposite state, nearly allied to chlorosis, and it was this novel theme which he sustained on Tuesday last in a very able manner. The arguments employed by M. Cazeaux were chiefly drawn from a consideration of the state of the blood in women so affected, and from the symptoms. With respect to the blood, the author affirms that, when the symptoms before alluded to exist, the quantity of red globules is considerably diminished, a change which we all know to be characteristic of chlorosis. The symptoms, also, are far from according with the idea of plethora. Many women are pale, and a well-marked *bruit de souffle* is heard over the carotid arteries. Turning next to the practical part of the question, M. Cazeaux admits that vænesection is often found useful; but, in the first place, he does not deny absolutely the existence of plethora; and, in the second place, as a serous plethora is actually present, the abstraction of a small quantity of blood may be advantageous. In the majority of cases, however, M. Cazeaux sees no necessity of having recourse to blood-letting, but combats the accidents —according to him, in a surer and safer manner— by preparations of iron, tonics, and an invigorating diet.

TREATMENT OF HYDROCEPHALUS.

M. Laffore, of Angen, announces that he has cured seven cases of tubercular meningitis with the ioduret of potassium. Several presented the symptoms of the third stage. The dose of the medicine was carried to sixty grains in the day.

M. GAY-LUSSAC.

This distinguished chemist has been labouring for some time under alarming symptoms of ossification of the aortic valves. M. Majendie has been to see him in the country, and writes to say that the symptoms have been somewhat mitigated. We shall however soon, I fear, have to record the decease of this great and amiable man.

SELECTIONS FROM FOREIGN JOURNALS.

CAFEINE.

Pure cafeine is fusible by heat, and volatilise without residue: its vapours, when condensed, are res produced as sublimed crystals, in colourless and diaphanous prisms. Four analyses, the results of which approximate greatly, give the following as its ultimate composition: C^{16}, H^{10}, N^4, O^3.—*Répertoire de Pharmacie.*

COMPOSITION OF COFFEE.

Cellular matter 34 parts, hygroscopic water 12, fatty matters 10 to 13, glucose, dextrine, indeterminate vegetable acid 15·5, legumen, caseine (gluten?) 10, chlorogenate of potash and cafeine 3·5 to 5, azotized organism 3, free cafeine 0,8, concrete essential oil, insoluble in water 0,001, aromatic fluid essence, of a pleasant odour, soluble in water, and a less soluble aromatic essence 0,002; mineral substances, potash, lime, magnesia, phosphoric, sulphuric, and silicic acids, with traces of chlorine, 6,697. This analysis was made by M. Payen, who gives the name, chlorogenic acid, to an acid he has discovered in coffee, because it imparts a beautiful green colour to the crystalline substance of coffee—the chlorogenate of potash and cafeine. The acid itself is of a white colour, soluble in anhydrous alcohol, more soluble in dilute alcohol, very soluble in water, and crystallises with difficulty. Its aqueous solution, almost saturated at 212, crystallises very slowly in miscroscopic prisms irradiating from common centres; and presents, after twenty or thirty days, numerous agglomerations in spherules of from 1 to 2 millimetres in diameter. Its aqueous solution has a well-

marked acid re-action. It is the active principle of the different colorations in the normal salt of coffee. The aromatic principle is entirely soluble in water.—*Répertoire de Pharmacie.*

SAFFRON OF MARS.

M. Calloud, of Annecy, states that he has purchased specimens of the hydrated deutoxide of iron (the old saffron of Mars) in sixty-five different shops at Turin, Grenoble, Lyons, Geneva, and Savoy, and only fourteen were unadulterated by copper. It had been prepared from the sulphate of iron of commerce, which always contains more or less copper. One of thirty grammes he has found from half a gramme to a gramme and a half of the sulphate and alcaline carbonate.—*Répertoire de Pharmacie.*

PRESERVATION OF THE BRAIN.

M. Dorvault remarks, that a solution of sugar in brandy will preserve the brain completely, and give it a remarkable degree of density.—*Répertoire de Pharmacie.*

GANNAL'S PROCESS.

M. Dorvault asserts, that M. Gannal preserves bodies by injecting a solution of the acetate of alum through one of the carotids, and then macerating the body for two or three days in a similar saline fluid. The injecting fluid is prepared by decomposing the solution of 1,000 grammes of the sulphate of alum, by a solution of 250 grammes of the acetate of lead. Another formula for M. Gannal's liquid is as follows:—1,000 grammes of common salt, 1,000 grammes of alum, 500 of nitre, and 20,000 of water. Another solution, said to be employed by him is a solution of equal parts of the sulphate and chloruret of aluminium. M. Dupré, one of his competitors, injected the carbonic and sulphurous acids, obtained by the action of sulphurous acid on charcoal by heat; and M. Sucquet used a solution of the chloruret of zinc. The last-named gained the prize.—*Répertoire de Pharmacie.*

CASTOR.

M. Woehler has ascertained that fresh castor owes its odour to the presence of a small quantity of phenic acid (phenol, hydrate of phenyle.) When castor is distilled with water, a few oily drops may be collected, which present the re-actions of this body. The residue of this distillation gives crystals of benzoic acid and salicine. The mother waters of the crystallization of benzoic acid also present, with the ferric salts, the re-actions of the salicylic acid.—*Répertoire de Pharmacie.*

RHEUMATIC AFFECTIONS OF THE STOMACH.

Dr. R. B. Stone says, that affections of this kind have been common during the past year in some parts of Illinois. He diagnosed them from organic disease of the organ, by observing, that a patient appeared worse every cold and damp day. He treated them successfully with colchicum and bitter tonics.—*North-Western Medical and Surgical Journal.* 1849.

EPIDEMIC DYSENTERY.

Dr. Casselberry treats this disease with salines and cooling remedies. Instead of opiates he gives bicarbonate of soda, gr. xv.; tartaric acid, gr. xii.; and Rochelle salts, ʒj. every half-hour until free evacuations are obtained. The action of the draught he has found most benign, allaying febrile symptoms, and at the same time relieving the sanguineous engorgement of the mucous membrane of the great bowels. This treatment, he says, is infinitely the most efficient of any he has witnessed.—*Western Lancet.*

PATHOLOGY OF DYSMENORRHŒA.

Professor Parker has lately treated a number of cases of dysmenorrhœa upon the theory proposed by the late Dr. John Macintosh, of Edinburgh, that the difficulty lies in the narrowing of the os uteri; great success has attended his practice. He relieves the stricture by introducing a bougie of sufficient size, precisely as in stricture of the urethra. He is satisfied that a great many cases of this distressing affection depend upon mechanical obstruction, which, by this mode of treatment, may be relieved from intense suffering and the evils (?) of sterility.—*New York Annalist.*

ORIGIN OF MOLES.

Dr. Lipscomb traces a close connexion between the development of these fleshy masses in the uterus and protracted lactation. He relates several cases in support of this theory of their origin.—*Western Medical and Surgical Journal.* 1849.

PATHOLOGICAL EFFECTS FROM THE USE OF IODIDE OF POTASSIUM.

Dr. Flagg asserts, the following morbid phenomena occasionally attend the use of iodide of potassium:—

1. Tumefaction of the gums, an increased flow of saliva, and a saline taste in the mouth, subsequently giving giving place to that of iodine.
2. Pain in the cardiac portion of the stomach after large doses.
3. Serous diarrhœa, unattended by febrile action.
4. Excessive secretion of urine, sometimes with pain in the kidney.
5. Symptoms of severe coryza and of bronchitis, with the exception of fever and muco-purulent expectoration.
6. Different forms of cutaneous disease, as acne, eczema, and purpura.
7. A condition of the eyes resembling catarrhal ophthalmia.
8. Augmentation of the secretive action of the mucous membranes, especially of those lining the genital organs.
9. Cerebral excitement, evinced by a mild intoxication, and sometimes cerebral congestion.—*Charleston Medical Journal,* May.

INDIAN HEMP IN FACIAL NEURALGIA.

Dr. Ruhbaum, of Potsdam, has employed the *Cannabis indica* in facial neuralgia with the most satisfactory results. Decided benefit was experienced in more than thirty cases, and a number were entirely relieved. He recommends from sixteen to twenty drops of the tincture, containing about one grain of the resinous extract, as a dose. Patients under its influence were sometimes affected by slight giddiness and lassitude; others were excited to great mirth.

INTERNAL USE OF CHLOROFORM.

Dr. Hartshorne has given chloroform internally to several patients in the Hospital of Pennsylvania. It must be largely diluted. In a painful neuralgic affection of the head, a woman took 75 drops at night with much benefit, and continued to improve under its use. In rheumatism it proved an admirable substitute for Dover's powder, and in flatulent colic it afforded great relief.—*American Journal of Medical Science.* Dr. R. T. Strother gave 100 drops to a cholera patient. It relieved the cramp and vomiting, and ultimately the man recovered.—*Western Journal,* 1849. Dr. Brickell, of New Orleans, gave doses of 100 drops in a case of traumatic tetanus, without any decided advantage.—*New Orleans Medical and Surgical Journal,* 1849; and Dr. Wariner mentions a case of dysmenorrhœa, regarded as a neuralgia of the uterus, in which it was resorted to with immediate relief.—*New Jersey Medical Reporter.*

OVARIOTOMY.

The Obstetric Committee of the American Medical Association seem to approve of Dr. Tilt's proposal to remove the dangerous and intractable ovarian tumours, by cauterising one part of the abdominal wall, and thus to excite an amount of inflammation which shall insure adhesion between the tumour and the parietal peritoneum, then to destroy by the further use of caustic, the abdominal wall and that of the tumour, and thus evacuate the contents of the latter. "The operation seems to the Committee to deserve further trial."—*Transactions,* 1849.

DIMINUTION OF FIBRINE BY AGITATION OF BLOOD.

In some experiments by M. Marchal, (de Calvi,) it would appear that agitation of blood out of the body, diminished the quantity of fibrine appreciable by the ordinary methods. Blood was drawn from the arm in four divisions; the first and last parts drawn were mixed and agitated; the second and third parts were allowed to stand; in the first portion the fibrine was diminished in ten out of twelve experiments. The two exceptions are not explained. The degree of diminution is not stated. The experiment being reversed, and the second and third portions being agitated—the first and fourth kept at rest—the result was the same.—*Gaz. des Hopitaux,* Jan. 24.

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THE MEDICAL TIMES.

SATURDAY, MARCH 2, 1850.

*** We have to request that all communications for the Editor be addressed to the care of Mr. John Churchill, Medical Publisher, 46, Princes-street, Soho.

We must also impress upon such of our Correspondents as address us anonymously, the necessity of favouring us with their names; not, of course, for publication, but as a pledge of good faith.

SIR JOHN FRANKLIN'S EXPEDITION.

(Concluded from page 44.)

In our last remarks we attempted to show the very great difficulties which would attend the endeavours of Sir John Franklin to procure sustenance for the crews of the Erebus and Terror, supposing that no "perils by waters" had long ere this caused the destruction of the vessels and their men. We still believe in these difficulties, notwithstanding the hopes held out by Sir John Richardson in his late narrative; the more so, considering the number of persons to be provided for, and holding in view that it is a mere surmise that the missing expedition has found shelter at Victoria or Wollaston Lands, the spots to which Sir John Richardson states deer migrate over the ice in the spring, and which are the breeding-spots of vast flocks of snow geese. If this be so, at any rate it may be *hoped* that here Sir John Franklin may be, and that he has not been driven to like localities as was Parry in his second voyage, of which it is stated, that during the months of March, April, and May, when the Esquimaux depend mostly on the capture of the seal and the walrus, which is attended with the greatest difficulty and watchfulness on the ice, (notwithstanding the *curiosity* of the former animal, *Vide* p. 44,) the whole tribe may be said to be literally in a state of starvation. We as equally desire, that neither may such naked and barren shores, as Parry, in his third voyage, visited, be the resting-place of the Expedition, and of which places it has been said that they were not merely desolate of human beings, but almost deprived of all animal and vegetable life,—a gloomy, sad, and melancholy land. (Barrow, op. cit.) We will trust, then, upon the hopes, forlorn as we may think them, that by one means or other Sir John Franklin has procured provisions—provisions of an animal nature. But this being effected, it is evident that *fresh* animal food during the winter could not be obtained; the summer seasons must furnish that supply which would require preserving for the greater portion of the year. It is true that, to some extent, animal flesh may be preserved fresh in northern climates, by almost freezing it and rubbing it externally with salt, as is proved also by the following fact, which occurred in Parry's second voyage. Referring to

Christmas-day, it is said: — "Among the luxuries was a joint of good English roast-beef, preserved by the outside being rubbed with salt." We presume, however, that this was cooked before being taken from England; but, under any circumstances, we believe that animal food, prepared in the summer, even in the polar regions, would have to undergo such process in order to preserve it for the long and dreary winter, that it could not fairly come under the denomination of *fresh meat*. Upon us, then, presses forcibly the question as to the means by which the crews of the Erebus and Terror have been protected from the ravages of *scurvy*,—a disease which makes such havoc amongst men when kept long on salt dietaries, wanting fresh vegetables, and overwhelmed by the depressing emotions of the mind. No one will pretend, we assume, that fresh esculent vegetable material is to be procured in the far North. That the ships were provided with the usual preventives, like lemon-juice, citric acid, vinegar, nitre, preserved yeast, sugar, &c. &c.,—in fine, with all those agents which may, in some way or other, be made subservient to anti-scorbutic purposes,—no one will doubt; but, admitting it to have been so, their period of duration must have had a limit, we presume, long ere this. But, even if it had not, yet we know that such make-shifts as these for fresh vegetable juices frequently fail, more especially when men are living under very unfavourable hygienic conditions, and suffering extreme depression of the emotional faculties. In Barrow's account of Parry's first voyage, we read, that "one case of scurvy was reported on the 2nd of January; Mr. Scallon, gunner of the Hecla, complained of pains in his legs, and the appearance of his gums left no doubt of the symptoms being scorbutic, which Mr. Edwards, the surgeon, ascribed to the deposit of moisture in his bed-place." Speaking of Parry's second voyage, the same Author says:—"The appearance of scurvy, in some slight but unequivocal symptoms, could scarcely be a subject of wonder, considering the length of time the ships' crews had no other dependence than upon their own resources, unassisted, as they had been, by supplies of fresh anti-scorbutic plants or other vegetables, a case unparalleled in the annals of navigation." Commander Lyon also alludes to "some very severe cases of scurvy."

But here only two winters were passed amid the ice, and, in Franklin's case, the fifth is now progressing! It is true, that, in Parry's first voyage, the Commander raised, in his cabin, a quantity of mustard and cress, of which, even in the severity of winter, he could generally insure a crop at the end of the sixth or seventh day. This was used as a successful remedy in the case of Mr. Scallon. But, if such resources were within the range of Sir John Franklin's powers, still, seed must have a limit to its store, even if such a description of Arctic horticulture could be made subservient to the wants of more than a hundred men. In the same voyage, an anti-scorbutic beer was issued, but, when the weather became excessively severe, the beer would not ferment so as to render itself palateable.

The difficulties to which we have thus alluded, great as we suppose them to be, and by which Sir John Franklin must have been opposed in the endeavour to maintain an existence for five winters in the Arctic Seas, we will yet, for the sake of argument, suppose to be overcome. But, allowing it, what opinion, may we ask, are we to give as to the conquering of other obstacles, almost equally as great. The question relative to Sir John Franklin may assume the following position:—Is it *probable* that natives of Britain can maintain even a moderate standard of health, when subjected to the constant and often extreme diminution of temperature, the negation for considerable periods, at intervals, of the direct rays of solar light, the peculiar hygienic, or rather anti-hygienic conditions, if we may so call them, which they are obliged to live under, and the intense mental depression as attendant or consequent upon a five years' residence in the Polar Seas, each successive year of which, in its course, must exert a deteriorating influence increasing in its ratio. In Parry's first voyage, so early as the 29th of October, the thermometer fell to 24° below zero, that is, to a temperature 56° colder than the freezing point of the scale of Fahrenheit. In the depth of winter it fell to 44° below zero; and on one day, a descent of —55° was experienced. Franklin, on the continent of America, observed the thermometer to sink to —57°; and when the instrument was hanging in his sleeping place, 16 feet from the fire, but exposed to its direct radiation, it stood more than once, even in the daytime, at 47° lower than the freezing point of water. On two of these occasions the chronometers, which during the night lay under Mr. Hood's and Dr. Richarson's pillows, stopped while these officers were dressing. But what are even such extremes as the above to those felt by Commander Back? On the 17th of January, he noted the thermometer at —70°, or 102° below the freezing point of water! Under these extreme degrees of cold which we have mentioned, it is distressing to touch any metallic substance with the naked hand in the open air, it producing a feeling of *intense heat* and taking off the skin. One of Parry's men, who incautiously went out, "not having time to put on his gloves, had his fingers, in half an hour, so benumbed, and the animation so completely suspended, that on his being taken on board by Mr. Edwards, and having his hands plunged into a basin of cold water, the surface of the latter was immediately frozen by the intense cold thus suddenly communicated to it." "It was necessary, some time after, to resort to amputation of a part of four fingers on one hand, and of three on the other." Alluding to the trapping of foxes in Sir James Ross's late voyage, the following statement occurs in that particular narrative of it which came before us:—"The poor little animals, in attempting to escape, tried to gnaw the iron bars, when, in many cases, their tongues adhered to the iron, and were frozen off, when they were killed from motives of humanity."

With regard to the diminution of light, and the negation of the direct solar rays, we may remark, that in Sir James Ross's late excursion, the sun was not seen from the ship from the 9th of November until the 9th of February. Parry, in his first voyage, was wholly deprived of the sun for 84 days, which may be reckoned (says Barrow)—as it really was—one continued night, lighted up only, and that partially, by the moon, and occasionally by the fleeting aurora borealis. "On the 6th of October," writes Parry of his second voyage, "there being now only an hour's day-light remaining;" and of his third voyage, "after an absence of 121 days" the sun was visible at the ships. Perhaps, then, for four months every year for the last five years, the crews of the Erebus and Terror have not experienced the effects of solar light!

We are not sufficiently acquainted with the actual arrangements made in Franklin's ships, for the purpose of mitigating the inconveniences arising from the deposit and accumulation of moisture between the decks and in the berths, consequent upon the manner of artificially heating these places, and the necessity of confining the air, pregnant with the exhaled vapour from the lungs and other sources, in order to maintain a sufficient temperature: to be able to say what drawback such inconveniences may be supposed to exert upon their crews. But under any contrivances, some must be exerted, we assume, since we believe that not only must the enclosed air be kept warm, but that the outer atmosphere must to a great extent be intentionally prevented from entering to displace it. We have already alluded to Mr. Scallon's case, in which scurvy was ascribed by the surgeon as partly due to the deposit of moisture in his bed-place. In Parry's second voyage, in which "Sylvester's warming apparatus" was employed, it is remarked, "We have never been so free from moisture." This is sufficient, however, to indicate the then existence to some extent of the trouble.

The last burthen laid upon the endeavouring to live, in these dreary regions of everlasting ice, is that which arises from the influence of the depressing emotions of the mind. This is a source of trouble pregnant with evil to the vital energies, and the slow but sure sapper of the very groundwork of the health and well-being of the men. In almost every polar expedition which has wintered but once even in the Arctic regions, the ingenuity and wisdom of the commander seems to have been taxed to the very utmost in maintaining mental quietude, hope, and cheerfulness, and in banishing despondency. And this "among a set of persons (and those persons seamen, too) secluded for an uncertain and indefinite period from the rest of the world, having little or no employment but that which is created to prevent idleness, and subject to a degree of tedious monotony ill according with their usual habits."—(Parry.) By dint of great foresight and ability, however, much was done in these voyages, in "diverting the mind from the gloomy prospect which would sometimes obtrude itself on the stoutest heart."—(Parry.) But, if so much required to be done to keep up the buoyancy of spirit and the breath of hope in men who were wintering but for one or two seasons only in the North, and under circumstances which they knew, considering their position, were not more pregnant with dangers than might be or really was anticipated: that required to be effected to enable the men to support the despondency and gloom of five long winters, under conditions, in all possibility, of the extremest danger, and most

forlorn contingencies, can alone be surmised by those who, like ourselves, have been not undiligent students of the "theory and practice" of the north-west passage.

Obstacles as the above circumstances might seem, *à priori*, to the permitting of natives of Britain to maintain an average standard of health and enjoyment in the Arctic regions, when forced to winter there, yet practice has proved that the early anticipation of Parry "that a ship provided with sufficient food, warm clothing, and fuel, might winter in the highest latitude we have been in without materially suffering either from cold or disease," is apparently quite a correct one, and the results of several voyages may be quoted in its confirmation. Parry states of his first voyage: "I had the happiness of seeing every officer and man on board both ships (with only one exception out of ninety-four persons) return to their native country in as robust health as when they left it, after an absence of nearly eighteen months." Parry, in his second voyage, passed two winters favourably in the North, and Sir John Ross wintered three whole seasons there, besides passing nine months in the spring and summer. The state of health of all parties engaged in the above expeditions *appearing* fully to bear out Parry's "anticipation." We say *appearing*, because we have yet to consider this point a little more fully; but with respect to what we have just said, and the accounts we have also of the comparative ease and comfort with which the extremes of cold and negation of solar light are borne, and of the general physical welfare of the crews who have wintered in the northern icy seas, when they have been well provided with food, clothing, fuel, and amusement, we are willing to admit their proper weight in the balance in regard to Sir John Franklin, if the following, which we shall urge, is permitted to have its due influence also, viz.:—We do not perceive it to be necessarily involved in the fact of British seamen being able to bear one or two winterings in the Polar Seas with impunity, that they can also do it for four or five such inclement seasons. The assertion that they can do so appears to us in the light of a gratuitous and rather an improbable assumption, when we consider the effects which an endurance of anti-hygienic conditions exerts upon the human organism.

In maintaining this position, we are not alone, as we conceive basing our judgment upon *à priori* or theoretic grounds. Before attempting to pass a third winter in the ice, Parry, in his second voyage, "requested the medical officers of the Fury to furnish *him* with their opinion, as to the probable effect that a third winter passed in these regions would produce on the health of the officers and seamen and marines of that ship, taking into consideration every circumstance connected with *their* situation." Mr. Edwards and Mr. Skeoch reported, "that during the last winter and subsequently, the aspect of the crew of the Fury in general, together with the increased number and character of the complaints, strongly indicated that the peculiarity of the climate and service was slowly effecting a serious decay of their constitutional powers." Commander Lyon reported, that he had, "for some time, been of opinion, that the Fury's passing a third winter in the country would be extremely hazardous. He was induced thus to express himself from the great change he had observed in the constitution of the officers and men of the Hecla, and by the appearance of some very severe cases of scurvy since the summer had commenced. Long continuance on one particular diet, almost total deprivation of fresh vegetable and animal food, and the necessary and close confinement for several months of each severe winter, were undoubtedly the causes of the general alteration of constitution which had for some time past been so evident. He conceived exposure to the same deprivations and confinement, the solitude of a single ship, and the painful monotony of a third winter, to men whose health is precarious, would, in all probability, be attended with very serious consequences." Lieutenant Liddon, in Parry's first voyage, is spoken of as having suffered from severe rheumatism, caused by the harassing circumstances and the increased cold, which reduced the mercury to twelve degrees below the freezing point, and which brought him to a very debilitated state. Concerning the principal exploring expedition in the late voyage of Sir James Ross, which left the ships in the month of May to investigate North Somerset, it was stated in the report we read, that on its return, "Every one was on the sick-list with the exception of Lieutenant M'Clintock." In fact, whenever a party left a vessel, it is described as being soon exhausted and knocked up. It was clear that the men were capable of little duty or exertion in that pitiless clime beyond the decks of the vessels.

Finally, we would remark that, after attentive study of this subject, we have ourselves become impressed with the belief that we should find that, after a second winter has been passed in the Polar regions, a slow but very sure diminution of vital energy and power would be visible in those who have passed it. That this diminution, though tardy and very gradual at first, would be likely to progress in an increased ratio, both as regards rapidity and power, in relation to the time of further detention in the North Polar regions; nay, we feel somewhat inclined, in spite of what has been asserted, to believe that deterioration to some extent of the powers of the human organism takes place even before the period we have alluded to above. That such deterioration of health and power is not at first and easily perceptible to those who suffer it, is a probable conclusion, seeing that—speaking generally—all suffer it alike, and thus have no standard to try their physiological powers by. But were it possible that a few individuals could the whole time maintain the maximum of the powers they took with them to these regions of eternal snow, and by it weekly measure the energies of their companions, once gifted with their own high standard, we doubt not but that they would discover that Polar wintering has quickly a malignant influence on the vital powers of the British seaman. We shall close this melancholy subject with the following quotations from Richardson:—

"Our own misery had stolen upon us by degrees, and we were accustomed to the contemplation of each other's emaciated figures." 'None of us were willing to receive assistance, although the task was disproportioned to our strength.'"

Though we would maintain, then, the fact of such deterioration as we have alluded to above, we are fully aware, that men who have passed only one or two winters in the North, on returning to this country, rapidly recover on their homeward voyage a fair standard of health. But, alas! of what avail all this, to the support of Franklin in the Polar regions during five long years!

THE ROYAL MEDICAL AND CHIRURGICAL SOCIETY, AND ITS PUBLISHED AND REJECTED PAPERS.

We recently laid before our readers a series of papers by Dr. John Taylor, of Huddersfield. Those papers treat of one of the most difficult subjects that can engage the attention of the scientific physician—the value of remedial agents in the treatment of disease. Let any man attempt to prove the power of a given drug to check the progress of a given disease, and he will be astonished at the small amount of positive evidence he can adduce in support of its curative pretensions. How often do we fancy ourselves the conquerors, when Nature has gained the victory for us? How often, from error in diagnosis, do we shout victory when we have been battling with a shadow?

We congratulate the Profession, then, in having before them a model in English to follow, in the difficult investigation to which we have referred. When the importance of the object, and the judgment and skill exhibited in solving the question examined in those papers are considered, too high a place cannot be assigned them among the scientific memoirs of Medicine.

The value of the results obtained by the numerical method must rest in medicine, as in every other science, on the ability and honesty of the observer, and on the number of the facts from which his conclusions are drawn. Of the honesty and ability of Dr. Taylor no one entertains a doubt; and we think the number of the cases analysed—forty—sufficient for his purpose. At any rate, if, with such opportunities as he enjoyed, he could only collect so many, what must we think of the conclusions of those who, with far fewer opportunities for observation, have ventured to speak in general terms!

We repeat, we do not know a series of papers in which are displayed a more philosophic mind, in appreciating the correct method of conducting difficult inquiries in the science of Medicine, more ability as an observer, or a sounder judgment in drawing conclusions from the facts observed. Nay, we are acquainted with only three Medical Essays in our own language, which prove their Authors to possess the same combination of the highest mental attributes of a physician,—we allude to Dr. Taylor's own Paper on the Causes of Pericarditis, Dr. Walshe's Report on Phthisis, and Dr. Jenner's Papers on Typhus Fever, now in the course of publication in this Journal. Yet the Council of the Royal Medico-Chirurgical Society deliberately declined the publication of Dr. Taylor's Paper, and not only of that, but of many others of high merit and have presented the Fellows with a tiny

tome, containing—and it may be said, without speaking in any way slightingly of them—productions inferior to the one we have published, and in no respect superior to several others of the rejected. If the Fellows do not interfere, their Transactions must inevitably become a mere collection of extraordinary cases—an English edition of the German Ephemerides. Accounts of animals with half brains, and children with no brains, are sure of a place,—and no one can object to their originality. The wonderful histories of wonderful women who sweat black, or of strange-visaged men who look blue, find instant insertion; while drawings of such faces, at the Fellows' expence, are made, if the contributions are but endorsed by the name of one of the few who rule the destinies of the Society. We trust the Fellows will be up and voting. The question is, not whether Dr. Seth Thomson and Mr. Charles Hawkins, or Dr. Basham and Mr. Erichsen, are fitter for the Secretaryship—Messrs. Johnson and Lane, or Messrs. Hewett and Toynbee, for the Council,—but the great principle of self-election by those in office, or freedom of election by the Fellows. Had the present system advanced the real interests of the Society, the Fellows might be unwilling to move in the matter lest they should replace those now in office by less able men; but it has not; and the Royal Medical and Chirurgical Society is fast becoming a bye-word for all that is unwise in the conduct of a Medical Institution. A beacon to warn others, and not a light to guide them. Should the Council unfortunately possess sufficient influence to determine the next election, we do not hesitate to assert, that they will add largely to the success of a Society which bids fair, ere long, to surpass them in everything but exclusiveness. The Profession must and will have a scientific Society of their own; they will not submit to be ruled over by a favoured few who fancy themselves—heaven save the mark!—the *élite* of the Profession.

All these quibbles, so lowering to the *status* of a Scientific society, would be avoided, if a list containing the names of those thought by the Council to be most eligible for seats in the governing body, were circulated some four or five weeks prior to the day of election; if between that date and the week preceding the election any two Fellows were competent to forward the name of one Fellow to the Secretary for insertion on that list; and, finally, if, before the day of election, a second paper were circulated by the Society, containing the names of all those nominated as candidates for seats at the Council, with the names of their proposers, thus: Dr. A. proposed by the Council; Dr. B. proposed by Dr. C. and Mr. B. The Fellows might then severally pass a pen through obnoxious names; and although, doubtless, in a large majority of cases, the men proposed by the Council would have a plurality of votes, yet the Society, as a body, would have a real voice in the election, and the decisions of a Council so elected would carry with them that weight which they now evidently lack. It is folly to say the proposed alteration would lead to intrigue and cabal,—as if the present system had not already produced those bitter fruits.

Let those, then, who cordially desire, not the ruin, but the renovation of the Royal Medical and Chirurgical Society, record their votes against the nominee list of the Council. Let them do this, moreover, uninfluenced by personal feeing, but animated solely, as we are, by the desire to vindicate that great principle, the right of every public body to self-government.

TERGIVERSATION OF "*THE LANCET.*"

We have been so amazed at the barefaced tergiversation of the *Lancet* upon the subject of the proceedings of the College of Surgeons and the National Institute, that, as Journalists, jealous of the honour and dignity of our vocation, we feel it to be our duty to place before the Profession the evidence of one of the most flagrant instances of inconsistency that ever disgraced the public press. Behold the result of *three short months!* The servile adulator of College liberality converted into the most rancorous denunciator of College selfishness,—the envious detractor of the policy and principles of the Institute metamorphosed into the humbled flatterer of its intelligence and success. Bah! A court jester never vindicated his right to his office by so ridiculous a parody on common-sense and truth. No man but the Editor of the *Lancet* could ever *cant* and *recant* in a manner so bold and so unblushing! We are not so simple as to imagine that even now he says what he means; for his mouthy professions about an Independent College have absolutely no meaning applicable to present circumstances, and his clamorous repentance is falsified by his insincerity. He sheds crocodile's tears. If such a man can secure the support and confidence of the Profession, there can be no hope for a truthful and independent advocacy of the Profession's interest; and political *prostitution* must be the rule of Medical journalism. We, at any rate, will never stoop to such profligacy, and are resolved to expose it, on all occasions, to public contempt.

"LOOK ON THIS PICTURE! . . . . . AND ON THAT!"

Leading Articles.

PROPOSED REFORM IN THE CHARTER OF THE COLLEGE OF SURGEONS; CONTEMPTIBLE DOINGS OF THE SO-CALLED NATIONAL INSTITUTE.

"On looking at the terms of the advertisement, it is but too plain that the old leaven is at work, and that it is the guilty object of these parties to place the Council of the College of Surgeons in a false position, in order to found a new claim for the establishment of an additional Apothecaries' Hall. Earnestly do we admonish the Council of the College of Surgeons to be on their guard, and not to be entrapped by *three or four worthless, subtle intriguers. The Council have manfully opened the question of the Charter, and the concession will be duly appreciated by many thousands of the Profession.* It would be *a real misfortune*, as well *as a disgrace, if the efforts of the puny creatures* who have set this new project in motion could mar what we hope and believe are *the just intentions of the Council*, and the *ardent expectations of a very great majority of the Profession.* Since these remarks were written, and within a few hours of the time of sending our Journal to press, our attention was directed to the following paragraph, which appeared in the *Daily News* of Wednesday."

Lancet, Nov. 24, 1849.

"An early insight into the objects of its promoters forewarned and forearmed us; and we consider that we have at least effectually done away with the scheme of the knavish 'Principles.' The originators of the projected worthless College may mourn the loss of place and official honours,—its scribbling advocates, from the abyss of vexation and disappointment, may snarl at those who have contributed to this result—they may 'bay the moon' with their rabid howlings,—but *the edict is gone forth—it is written on the wall—the College of 'Apothecaries' never was, and never will be!!*

"May the opening of the Session of Parliament ere long announce to us a *bright prospective!*"

Lancet, Feb. 2, 1850.

Leading Articles.

INSOLENCE OF THE COLLEGE COUNCIL TO THE MEMBERS. A NEW AND INDEPENDENT COLLEGE NECESSARY AND DESIRABLE.

"Looking to the odious letter; to the proposed new regulations transmitted to Sir GEORGE GREY—which are valueless chaff; looking to the insulting Oration of Mr. SKEY, addressed to the College 'geese,' we could *almost* RECANT all that we have recently said in favour of the Council. It was evidence of our earnest desire to obtain an amicable settlement of the affairs of the College of Surgeons, on a basis sufficiently liberal and comprehensive, to have made that Institution the greatest and most powerful medical and surgical College in the world.

"The 'geese' of the Council, if we may retort their own phrase upon them, are pluming themselves upon a few sleek and silly periods, in the 'fine writing' of the letter to the Institute! But who are enjoying the matter most? We answer, the COUNCIL of the INSTITUTE, which the COUNCIL of the COLLEGE are striving to render NATIONAL. *The men who meet at Hanover-square* have obtained a victory over the 'pures' who 'shine' at Lincoln's-inn-fields, and they will not be slow to improve their victory. We confess that, notwithstanding all old antipathies and remembrances, our sympathies are with them rather than with the College Council, who have grossly betrayed the interests and rights they should have fostered and protected."

"We, therefore, in conclusion, call upon 13,000 of our professional brethren to arise in their might, intelligence, and professional dignity,—to assume that noble attitude and high position which belong to them as men of science, learning, and usefulness,—*and to demand, as with one mind, that the degrading law which excludes Practitioners of their own class from seats at the Council-board of their own College, be forthwith and for ever annihilated;* and that, failing in that demand, their voices be heard throughout the whole length and breadth of the land, in claiming a Charter for an INDEPENDENT COLLEGE, which shall be dedicated to the government and protection of Practitioners in MEDICINE, SURGERY, and MIDWIFERY.

Lancet, Feb. 23, 1850.

Our readers will remember that, throughout the struggle with the College of Surgeons, we have been precise and decided in our views, and have not hesitated to declare our opinions with vigour and firmness. What has been the result? That the Editor of the *Lancet* has been glad to learn FROM US the first principles of Medical legislation. He has stolen our ideas without acknowledgment—almost re-written our Articles, shambled after us from week to week with halting footsteps, and has made our cold meats furnish forth his "marriage feast." The *Lancet* has at last discovered that the General Practitioners ought to be eligible to a seat on the Council of the College of Surgeons, and in this opinion he only re-echoes our sentiments, declared in the subjoined quotation, and reiterated over and over again in the pages of this Journal. We append the following quotations, merely to show that they form the text of all the *Lancet* has written upon the subject; and that—without rendering us any thanks, or appending a reference to our Journal, at the bottom of his lucubrations, according to the rule adopted by all respectable Journalists—he is decking himself with borrowed plumes.

"And we now unhesitatingly express our *unequivocal* CONDEMNATION *of a proposition that would, if converted into law, exclude one and all of the leading General Practitioners in this Metropolis and the Provinces, however scientific and high in social station they may be, from the superior honours and privileges of their own College.*"—*Medical Times*, Feb. 9, 1850.

"We tell them that the General Practitioners demand the *legal recognition of the right* of controlling the curricula of study and examinations for their own class; and that their claims in respect to *Surgery* they will NEVER forego! Choose, then. Concede a College of *General Practitioners*, with a right to examine in Surgery, or *convert your own Institution* into such a College. The Profession will not be Council-ridden any longer, but are resolved, in some form, to have the management of their own affairs."

Medical Times, Feb. 16, 1850.

CONVENTION OF POOR-LAW MEDICAL OFFICERS.

A DEPUTATION, from the Committee recently formed for the purpose of representing to the Poor-law Board the propriety of considering the claims of the Medical Officers of Unions to a participitation in the Superannuated Fund, proposed to be formed for the benefit of Union Officers, had an interview, by Deputation, with the Committee of the Convention of Poor-law Officers at the Hanover-square Rooms, on Thursday the 28th, when the subject underwent a lengthened discussion. The further consideration of the matter was adjourned to that day week. We sincerely trust that the two Committees will unite their efforts, for nothing could prove more disastrous to the interests of the Poor-law Medical Officers, than the independent and possibly opposing operations of separate Committees formed to carry out the same objects.

MEMOIR OF WILLIAM CLIFT, ESQ., F.R.S.

Of those members of the Medical Profession whose career, though unrewarded by wealth, and undistinguished by high official title, offers a profitable example to the younger cultivators and practitioners of the Science, WILLIAM CLIFT has been one of the most eminent and remarkable.

The amiable and attractive personal character of Mr. Clift, and devotion of his long and useful life to the preservation and perfection of the Museum founded by his great master JOHN HUNTER,—a Museum which is the pride and ornament of the Surgical Profession, and which forms the sure basis for future improvements in physiology and pathology—have excited a very general desire amongst the Profession for some more extended biographical notice, than those that appeared in the public prints at the time of his lamented decease; and this wish we are enabled to gratify by availing ourself of the Memoir recently published in the Anniversary Address of the President of the Royal Society, and contributed to the obituary of that official document, it is understood, by Professor Owen, whose connexion with the lamented deceased gives authenticity to the brief but highly interesting biography.

A notion somewhat current in the Profession, of a close relationship between Hunter and Clift, founded on some resemblance of physiognomy, and fostered by the assertions of a contemporary journalist, is refuted by the first paragraph of the Memoir.

"William Clift was born at Burcombe, near Bodmin, on the 14th of February, 1775, and was the youngest of seven children of the same parents. His father, Robert Clift, died a few years after, leaving his widow and family in narrow circumstances. William was put to school at Bodmin, and soon distinguished himself by the facility with which he acquired and the tenacity with which he retained whatever he was taught. Having a strong natural talent for drawing, some productions of his early pencil attracted attention, and brought the youth under the notice of Colonel Gilbert, of the Priory, near Bodmin; and the good disposition and promising abilities of the young artist made him a favourite with both the Colonel and Mrs. Gilbert. This amiable lady had been the schoolfellow of Miss Home, and maintained a friendly correspondence with her after her marriage with John Hunter. Thus Mrs. Gilbert became acquainted with the loss which Hunter had sustained by the departure of his able anatomical assistant and draughtsman, William Bell, for Ceylon, in 1790; she accordingly communicated to Mrs. Hunter the qualifications of her young *protégé*, and strongly recommended him as likely to prove a satisfactory successor to Mr. Bell. Her advocacy was successful, and William Clift was sent to London, approved of, and in the year 1792 was apprenticed for six years to John Hunter, who received him into his house, without a fee,—the services of the youth as amanuensis, anatomist, and artist, being the sole equivalent expected for this inestimable advantage at the outset of his career. Unfortunately, John Hunter died, October 16th, 1793. During the brief period in which these relations subsisted between him and Mr. Clift, they appear to have been most satisfactory to both. There was no lack of employment. The young apprentice was roused at six in the morning, and earlier in the summer season, to assist and attend upon the great anatomist in the dissections which he carried on before breakfast. The coarser anatomical labours of maceration and injection, the copying out of detached MSS. records, and making sketches and drawings of the parts displayed, occupied the day; and in the evening he was called to the desk of his indefatigable master to write from dictation, usually until midnight.

"This was a severe course of labour for a youth of seventeen; yet such was Hunter's goodness of heart, such the simple earnestness of purpose and kindness of demeanour of the master, that no other sentiments were engendered in the congenial mind of the apprentice save those of the warmest affection and deepest reverence for the memory of him whom he ever regarded as his best teacher, benefactor, and friend.

"'From the very beginning,' writes Mr. Clift, 'I fancied, without being able to account for it, that nobody about Mr. Hunter seemed capable of appreciating him. He seemed to me to have lived before his time, and to have died before he was sufficiently understood. . . . . The more I have seen, the more I have known, the more I have learned, and the more I have thought, the stronger the conviction grows, that I shall never look upon his like again.' These sentiments and affections were soon to be put to a severe trial. Hunter died in difficulty and debt; the sole provision for his family was his museum. The executors, Dr. Baillie and Mr. Home, were young men struggling against the difficulties that oppose the early progress of the physician and surgeon.

"'I was left alone,' writes Mr. Clift, in the memorandum already quoted from, 'until the year 1800 in charge of the Collection, with two gallons of spirit occasionally to keep it from decay, and with seven shillings a week,—all, I was told and believed, that could be spared,—at a time when the quartern loaf was, for a short period, two shillings. Thus I had no obstruction to my studies, but unluckily no one to direct them. It is true, I had a large part of Mr Hunter's manuscripts put into my custody, and, having these stores at my discretion, I naturally consulted them, having no other books to read nor money to buy any; and anxious to learn something of the Collection left solely to my charge, I read them over and over, and in this way made myself somewhat acquainted with the end and object of the Collection generally, and with the history of many of the individual preparations; and every step thus acquired made me desirous to acquire more.'"

It would seem that the young depositary of the Hunterian treasures found, in his skill as an artist, some means of eking out the pittance allotted to him from the wreck of Hunter's worldly goods. In most of the medical, surgical, or anatomical works, tracts, or articles published during this eventful period of Mr. Clift's life, the illustrations appear to have been contributed by him. The beautiful plates in the quarto edition of Baillie's Morbid Anatomy bear the name of "William Clift" as artist, and the numerous illustrations of Home's early work on Diseases of the Prostate appear to have been both drawn and engraved by Clift. Numerous plates in the earlier volumes of Rees' Cyclopædia were engraved from his drawings; and the beautiful figures in Russell's History of Indian Serpents are by Mr. Clift. In the meanwhile, Dr. Baillie gave Mr. Clift free admission to his anatomical lectures, and Mr. Home (afterwards Sir Everard) occasionally employed him to assist in his operations on private patients, or in the dissection of rare animals. The Memoir goes on to state:—

"Mr. Hunter's premises consisted of the residence in Leicester-square, a house in Castle-street, and the museum which he had built in the intermediate space. The house in the square was let to lodgers; the house in the rear was inhabited by Mr. Clift and the old housekeeper of the family; and with no other aid than this, Mr. Clift undertook the custody of the museum until Government should determine to accept or decline the terms on which it was offered by the testamentary directions of Hunter.

"The first proposition in 1794 had been ill received by the Minister. 'What! give 20,000*l.* for bottles—we want the money to buy gunpowder!' was the reply of Pitt, when the subject was first broached to him by Banks. But Sir Joseph was not easily discouraged, and his endeavours, with those of other friends of science and cherishers of the memory of Hunter, were at length successful. After seven years' siege of the Treasury, the Premier sanctioned the introduction of a measure by which Parliament became the purchasers of the Hunterian Collection for the sum of 15,000*l.*, and it was then transferred to the Corporation of Surgeons, in a better state of arrangement and preservation than when it received in 1793 its last addition from the hands of its immortal founder.

"I have digressed into these details in order to place in its true light the debt which science owes to William Clift, and what must ever be regarded as his chief merit, viz., his single-minded fulfilment of arduous duties under peculiar difficulties, and his noble self-devotion to the achievements and memory of his great master, during the period that elapsed between his decease and the ultimate transfer of the collection to its present worthy custodians. Mr. Clift has described the almost solitary condition in which he suddenly found himself with his great and important charge. At an age when the passions are strongest, in a metropolis teeming with opportunities and temptations,—not unconscious, moreover, of his own abilities and of the advantage which his apprenticeship to Hunter would give him in the pursuit of the practice of surgery,—neither pleasure, profit, nor ambition, could make him swerve from the course of duty to which he had devoted himself.

"The Corporation of Surgeons having accepted the Hunterian Collection on the terms proposed by Government, was very properly re-incorporated by Charter, dated 22nd March, 1800, under the title of the Royal College of Surgeons.

"One of the first acts of the College, in taking upon itself this new bond of relation to the natural sciences, was to appoint Mr. William Clift Conservator of the Museum, under the superintendence of a Board of Curators chosen from the Council. And the Board, elected on the 3rd of June, 1800, in its first 'Report,' expresses 'its satisfaction that the Conservator has manifested qualifications for all the important offices under the distinctions of arrangement and description, as well as for his other duties.'—P. 7. And in the first statement of the expenses of the Museum is the item,—'Salary and gratuity to the Conservator from Christmas, 1799,—the date of his appointment,—'to Midsummer, 1801,—145*l.*'

"From this time forwards the time and talents of Mr. Clift were exclusively devoted to the advancement of comparative anatomy and physiology, either indirectly by the preservation and increase of the Museum, or more immediately, by anatomising and depicting the structure of new or little-known animals.

"Sir Everard Home having undertaken the charge of preparing a catalogue of the Hunterian Collection," which, by the way, he never fulfilled, "much of Mr. Clift's time was occupied in assisting that gentleman in investigations which seemed to relate to the desired object. The results of most of these labours have been recorded in the Transactions of the Royal Society, and, with few exceptions, the illustrations of the numerous papers on Comparative Anatomy, by Sir Everard Home, are from the accurate and elegant pencil of Mr. Clift.

"Pending the absence of catalogues, the preparations of the Museum were orally explained to visiters by the Conservator, whose style and matter bespoke the genuine Hunterian source from which he had derived his knowledge of the nature and scope of the collection. On every occasion, also, Mr. Clift's time and knowledge were at the service of all who, in the investigation of any subject of anatomy, physiology, or palæontology, had occasion to consult the Museum under his charge. His own immediate contributions to science, at least those bearing his name, are but few. Two only appear in the Transactions of the Royal Society; the first is entitled "Experiments to ascertain the Influence of the Spinal Marrow on the Action of the Heart in Fishes," and is printed in the 105th volume of the Philosophical Transactions in the year 1815; the second and last contribution to the Royal Society was his "Description of some Fossil Bones found in the Caverns at Oreston," printed in the volume for the year 1823.

"Both papers are characterized by the clearness and simplicity of the style in which the facts and experiments are narrated, and by the soundness of the conclusions deduced from them.

"By the judicious choice of the subject of his experiments, and the care and skill with which they were performed, Mr. Clift, in the first of these papers, established, in contravention of the conclusions to which M. Le Gallois had arrived, that the action of the heart continues long after the brain and spinal marrow are destroyed, and still longer when the brain is removed without previous injury to its substance; together with some interesting collateral conclusions.

"Soon after the publication of these Memoirs, Mr. Clift was elected a Fellow of the Royal Society, (May 8th, 1823,) and served on the Council of the Society, in the years 1833 and 1834. He communicated some memoirs to the Geological Society, two of which, "On the Fossil Remains from the Irawaddi' and 'On the Megatherium,' are published in the Transactions of that body. Most of the works or memoirs, however, on the fossil remains of the higher classes of animals, which have appeared since Sir Everard Home's first paper on the Proteosaurus, in the Transactions of the Royal Society for 1814, until within a recent period, are more or less indebted to Mr. Clift, either for his determination of the fossils described in them, or for his accurate and beautiful figures of them. Numerous and hearty are the acknowledgments by their respective authors to Mr. Clift for this valuable assistance. In Dr. Mantell's memoir on the Iguanodon, published in our Transactions in 1825, the author says, 'Among the specimens lately collected, some, however, were so perfect, that I resolved to avail myself of the obliging offer of Mr. Clift, to whose kindness and liberality I hold myself particularly indebted, to assist me in comparing the fossil teeth with those of the recent Lacertæ in the Museum of the Royal College of Surgeons. The result of this examination proved highly satisfactory, for in an Iguana we discovered teeth possessing the form and structure of the fossil specimens.' And Baron Cuvier, in the concluding volume of his great work on 'Fossil Remains,' acknowledges his obligations for many drawings, 'faites par M. Clift, dont le beau talent a enrichi ce recueil de tant de planches non moins remarquables par leur exécution que par leur fidélité.'

"To return, however, to the more immediate field of Mr. Clift's labours, it is recorded in the edition of the Synopsis of the Museum of the Royal College of Surgeons, published by the Council in 1845, that, 'under Mr. Clift's superintendence, the removal of the collection from Castle-street, Leicester-square, to a temporary place of deposit in Lincoln's-inn-fields, in 1806, and thence to the Museum of the College in 1813, was effected without the slightest damage to any of the frail and delicate preparations of which it, in a great part, consists.' And the best testimony to the exemplary fulfilment by Mr. Clift of his responsible duties is afforded by the present condition of the Hunterian collection, and the great accessions it has received during his able conservatorship. From the duties of this office Mr. Clift was allowed to retire with a full salary, which had been progressively increased to 400*l.* per annum a few years before his decease, which took place on the 20th of June, 1849, six weeks after that of his wife, to whom he had been tenderly attached and united more than fifty years."

THE COUNCIL OF THE NATIONAL INSTITUTE TO THE COUNCIL OF THE COLLEGE OF SURGEONS.

GENTLEMEN,—I am directed, by the Council of the National Institute of Medicine, Surgery, and Midwifery, to acknowledge the receipt of a letter, bearing date the 5th of February instant, in which the Council of the College desire to express their regret, that they cannot adopt the views set forth in the "Suggestions" submitted to the Council by Mr. Bottomley, the Chairman of the Committee of Associated Surgeons of England, at the interview which took place between the President and Vice-Presidents of the College, and a Deputation appointed by a meeting of delegates from various Medical bodies desirous of promoting Medical Reform, and at which interview the suggestions alluded to were presented.

A copy of this communication has been laid before the Deputation.

The Council of the National Institute deem it unnecessary, on the present occasion, to make any remark upon the reasons assigned by the Council of the College of Surgeons, in support of their determination to reject Mr. Bottomley's "Suggestions." The Council of the National Institute limit their observations in reply to that portion of the letter which bears reference to the "heads" or "principles" agreed to by them at the Conferences held at the Royal College of Physicians, conjointly with the Medical Corporations, and designed to be incorporated as a Bill for the regulation of the Medical Profession.

The Council of the National Institute again declare, that they fully abide by the arrangement, as set forth in the "heads" or "principles" adopted by the Conference Committee, and that they are willing to assist in obtaining a Legislative measure, founded upon those principles, provided the other assenting parties adhere to them in all their integrity.

It is, therefore, with feelings of the utmost surprise and astonishment that the Council of the National Institute have perused the eighth paragraph in the letter recently received from the Council of the College of Surgeons, and which paragraph is as follows:—

"8th. The College of Surgeons consented originally to the institution of a new College, as one for the more efficient performance of the duties confided to the Society of Apothecaries."

The Council of the National Institute have no hesitation in affirming, that this interpretation of the "principles" is totally at variance with the tenor of the proceedings at the numerous conferences from which the "principles in question emanated, and they particularly direct the attention of the Council of the College of Surgeons to the following remarks:—

1st. The Council of the Institute were invited to nominate two General Practitioners, being members of the College of Surgeons and Licentiates of the Society of Apothecaries, to act specially as the representatives of the General Practitioners at the Conference Committee, in accordance with the suggestion of the Right Honourable Sir George Grey, the Secretary of State for the Home Department; which invitation was accepted and responded to by the Council of the Institute in deputing two of their body, possessing the requisite qualifications, to represent them;—not as Apothecaries, who were already represented at the Conference, but as General Practitioners in medicine, surgery, and midwifery;—thus clearly indicating the distinction, *ab initio*, between the Society of Apothecaries and the General Practitioners; had it been otherwise, and had the Council of the Institute no other interests at stake than those appertaining to their rights under the Act of 1815, they might have deputed, with perfect propriety, the representatives of the Society of Apothecaries to act for them, in whose judgment, discretion, and enlightened policy, the Council of the Institute had the most implicit confidence.

2nd. The Council of the National Institute, in furtherance of repeated resolutions, adopted by large and influential societies and general meetings, have upon every occasion maintained that they considered it essential to a satisfactory settlement of the Medical Reform question, that the General Practitioners should have the unrestricted right to regulate the education and examination of the candidates for admission into their body, in every branch of medical science, subject only, in common with other corporate and educational bodies, to the general supervision of a controlling Council; and throughout the whole of the discussions which have taken place at the Conferences of the Royal College of Physicians on this subject, their representatives, as the Council of the Institute understand, have unequivocally claimed this right on public and professional grounds, a right which, in the opinion of the Council of the Institute, has been rendered still more essentially necessary by the arbitrary establishment of the Fellowship in the Royal College of Surgeons.

Furthermore, in all their communications with the Government, the Council of the Institute have invariably claimed the right to test the candidates for their diploma in all branches of medical science they might deem necessary, and the justice and expediency of this claim has been invariably admitted.

3rd. It has long been known to the Profession that the Society of Apothecaries, with great public spirit, and a disinterestedness that deserves the highest commendation, consent to relinquish the powers deputed to them by the Apothecaries' Act of 1815, solely upon the condition that the General Practitioners are to possess an efficient control over the education and qualifications of their own class, and especially that they shall, in any future arrangement of the Profession, be under no restriction whatever in the examination of their candidates.

4th. The Council of the Institute can have no hesitation in declaring, most positively, that the parties to the Conference Committee, holding its meetings at the Royal College of Physicians have fully and completely recognised this principle. Not only were the proceedings of the Conference Committee originally founded upon it, but the Resolution of the 2nd of May, 1849, the last formal act of the Conference, was framed and assented to for no other purpose than to ratify this principle and to satisfy the Council of the Royal College of Surgeons as to its operation as respects the diploma. In corroboration of this statement, the Council of the Institute call the attention of the Council of the Royal College of Surgeons to the following Memorandum, read by the representatives of the General Practitioners to the Lord Advocate, in the presence of the other parties to the Conference, on the 28th April, 1849:—

"COPY OF MEMORANDUM.

"The representatives of the General Practitioners in the Conference Committee, respectfully represent to your Lordship, that they consider it essential to a satisfactory settlement of the Medical Reform Question, that the General Practitioners should have the unrestricted right to regulate the education and examination of the Candidates for admission into their body, in every branch of Medical science, subject only to the general supervision of the Controlling Council; and that throughout the whole of the discussions which have taken place on this subject, they have upon every occasion unequivocally claimed this right, on public and professional grounds; and they believe it has been fully considered and conceded by all parties.

"They further respectfully represent to your Lordship that they deem it essential to the harmonious working of a new Act of Parliament, and for the prevention of any future misunderstanding, that for obvious reasons this right should be recorded and duly provided for in the Charter proposed to be granted to the General Practitioners, and also in the Act of Parliament.

"Without such a record including surgery, on any appeal to the Supreme Council they would be unable to sustain this right, and the omission of the word 'surgery' altogether in these documents, would

place in the hands of any party who might consider the interests of the General Practitioners as opposed to their own interests, a power not only of depressing the education of the General Practitioner as respects surgery; but also as respects the other branches of Medical science and practice, comprised in the terms medicine, or medicine and midwifery.

"JAMES BIRD.

"April 28th, 1849. HENRY ANCELL."

The resolution of the 2nd of May, above referred to, and agreed to by the Conference Committee unanimously, was as follows:—

(Copy.)

"That the Council of the Royal College of General Practitioners shall have the power to direct the entire course of study to be followed, and to test the competency of the candidates for the diploma of the College by such examinations as it may deem necessary prior to their admission into the said College.

"But it is clearly understood by all the parties assenting to this resolution, that the competency of the persons examined to practise surgery shall not be specified in the diploma, such certificate of competency in surgery being provided for by the subsequent examination at the Royal College of Surgeons."

The Council of the Institute desire, without compromising their opinions as to the propriety of creating an Institution that should comprise, within its own limits, the entire range of Medical and Surgical knowledge, to remind the Council of the College of Surgeons, that they have, in conjunction with the other bodies, admitted the fact adverted to in the letter of the College of Surgeons, namely, that many of those persons preparing themselves for general practice, had, for years past, voluntarily sought the diploma of the College as the best guarantee of their surgical qualifications; and the Council of the Institute, in adopting the "principles" agreed to at the Royal College of Physicians, consented to an arrangement, by which it is provided that every future General Practitioner, without exception, should possess, in addition to his own diploma, the diploma of the Royal College of Surgeons also.

A new arrangement of the Medical Profession, now rendered absolutely indispensable by the anomalous state of the existing laws, the irregularities of practice, and the discordant opinions prevailing, as well amongst the Corporations as the individual members of the Profession, must be, in the opinion of the Council of the Institute—an arrangement involving mutual concessions, or a re-organization of the Profession upon an entirely new basis, irrespective of Corporate interests.

The Council of the National Institute have invariably conducted their negotiations with the Medical Corporations in the spirit of concession, and have employed their best efforts to temper the sanguine expectations of the great body they represent; it is, therefore, with regret, and some serious apprehensions for the future tranquillity and well-being of the Profession, that they observe that so little of this spirit pervades the Council of the Royal College of Surgeons of England.

The Council of the Institute cannot avoid expressing their surprise at the general tone of the communication they have had the honour to receive from the Council of the Royal College of Surgeons, and more particularly at the assumption therein contained, that the recently created class of Fellows are of a higher grade than the great body of Medical and Surgical Practitioners who have not been admitted within the pale of that arbitrary distinction. The Council of the Institute most respectfully remind the Council of the College of Surgeons, that the gentlemen whom the latter have thought proper to regard as belonging to a grade inferior to that of the Fellows, possess, *in addition* to the qualifications in Surgery given by their College, certificates of competency also in *Medicine* and Midwifery, obtained by a strict examination on those subjects. The Council of the Institute regard the statement of the Council of the College of Surgeons as calculated to mislead the public at large; and they feel themselves compelled to remind the Council, that, in a Profession which *de facto*, and even according to one of the highest authorities of their own body, (the late Mr. Abernethy,) is one and indivisible, the assumption of inferiority of grade on the part of a class of individuals who have been educated in, and actually practise, all its branches, as the General Practitioners of Medicine, Surgery, and Midwifery do, and of superiority on the part of those whose education is limited to one branch, and whose practice, if the Fellowship be of any value at all, ought to be limited to that of *pure Surgery*, is a manifest inconsistency, and can but prove offensive to every right-minded individual in the Profession.

To that portion of the Letter from the Council of the College, in which it is suggested that the future education and examination of the General Practitioners should be vested in the Colleges of Physicians and Surgeons, the Council of the Institute entertain the same objections as heretofore, which objections were most explicitly and effectively placed before the late Government, when Sir James Graham's Medical Bills were under discussion.

In conclusion, the Council of the Institute regret that an important and influential body, as the Council of the Royal College of Surgeons undoubtedly is, should have repudiated the "principles" unanimously agreed to by the Conference Committee; and as, from the tenor of the Letter of the Council of the College, the course taken by the Council is likely to interrupt, if not to terminate, the existing negotiations, the Council of the Institute feel it a duty to themselves individually, and to the public at large, who are most deeply interested in possessing, not merely a *limited* number of well-educated practitioners in *Surgery*, but a large class of completely educated and thoroughly competent General Practitioners of Medicine, Surgery, and Midwifery,—to declare that they are firmly resolved to maintain, both in and out of Parliament, their right to the unrestricted examination of the Candidates for general practice, that such examinations comprise all subjects essential to or connected with the due and efficient practice of the Profession, and that the efforts of the Institute will never in the smallest degree relax until this act of justice is accomplished, either by a complete change of the Constitution of the Royal College of Surgeons, or by the institution of a new Royal College of General Practitioners in Medicine, Surgery, and Midwifery.

I have the honour to be, Gentlemen,
Your most obedient Servant,
GEORGE ROSS, Secretary,
The National Institute of Medicine,
Surgery, and Midwifery,
4, Hanover-square, Feb. 16, 1850.

GENERAL MEETING
OF THE
GRADUATES OF THE UNIVERSITY OF LONDON.

A large and influential meeting of the Graduates of the University of London was held on Tuesday evening at the Freemason's Tavern,—the chief object of the meeting being to promote the admission of the graduates to Corporate powers in the University, where they have at present no voice.

Dr. Sibson, on taking the chair, remarked, that all present would feel with him that they had met, not in the cause of disorder and agitation, but in that of order and organisation. All the graduates present knew that their degrees were of great intrinsic value, having been bought at the highest price—the price of knowledge and intellect. Notwithstanding this, the graduates were placed in this unfortunate position—that while they were themselves acquainted with the value of their degrees, their importance was unknown to the world at large. They had the mortification to find, that the title of M.D. conferred by the London University, after examinations perhaps more testing of knowledge than those of any other University, did not rank, in general estimation, before mere ordinary degrees, conferred, perhaps, after very slight examinations, or even after none at all. The high intrinsic value of their degrees was due to the severity of their examinations, which could only be answered by much mental cultivation, and for this they were grateful to the Senate and the Examiners. In the future career of the University, to meet the developing wants of the times, it might be necessary to grant degrees in Sciences as well as in Arts and Medicine; but whatever degrees were granted, whatever their nature or title, it was to be earnestly hoped that the Senate would maintain that high standard which they had so wisely established, as the only solid basis of the reputation of their University. The University of London had existed twelve years, its graduates were between 500 and 600; it had thirty colleges in the United Kingdom; connected with it were numerous medical schools, and yet, great and important as was the actual position of their Metropolitan University, its very existence was quite unknown to the great majority of intelligent men in England. Why was their University unknown? One great reason was, that instead of possessing a noble edifice, becoming a Metropolitan University, their dwelling-place was up-stairs, above a School of Design; their apartments were quite incapable of accommodating the candidates; indeed, the senate had been obliged, for the matriculation examination, to borrow one room from the School of Design and another from King's College. How could those examinations be efficient unless the examiners possessed an adequate Examination-hall? Many of the petty towns in Germany possessed magnificent edifices in their Universities, yet this, the Metropolitan University of this great kingdom, in the greatest of cities, possessed no University building. Might they not hope that this great want would be speedily supplied, and that they would, ere long, possess a University edifice worthy of this Metropolis, that would at once proclaim to all the existence of the University of London? The other great reason for the indefinite position of the University was the want of complete organization. At present the graduates had no share in the government of the University, and took no recognized part in promoting its welfare. The Government and the Senate had founded the University with great judgment and success, and had created in the existing 550 Graduates the means of assisting and strengthening the Senate by their co-operation. Why should not the Graduates of proper standing and position be called into convocation? Their interest in the honour, reputation, and usefulness of the University was inalienable. In maintaining the reputation of the University they maintained their own; for to the University they owed their academical status. The Graduates unite heartily in the great purpose of being admitted to a share in the government of the University, a position to which they were entitled by their number, their standing, and, above all, their interest in the welfare and high standing of the University. The Chairman, in conclusion, felt assured that the Graduates at that meeting would, by their sagacity, their moderation, and their resolution, in aiming at the attainment of a great purpose, prove to the Government, the senate of the University, and the world that they were entitled to that place in Convocation which they so earnestly desired.

The Secretary in Arts and Laws having read the Report of the Committee,

Dr. Storrar moved the first resolution:—

"That the Graduates approve of the course pursued by the Committee, in endeavouring to carry out the principles agreed upon at the last General Meeting, viz.—That the Graduates shall in future form a part of the Body Corporate of the University,—that the government of the University shall consist of a Chancellor, a Senate, and a Convocation: the last to be composed of all Graduates of certain standing; that eventually the Senate shall be elected by Convocation; that all alterations in the fundamental law of the University shall require the assent of Convocation; that while the General Executive management of the University shall be confided to the Senate, it shall be subject in certain cases to the veto of Convocation."

Mr. George Jessel, M.A., in seconding the resolution, drew attention to the fact that the Graduates had never asked to control the executive administration of the University. They would certainly form as competent an electoral body as most bodies, whether national or academical. The Senate, at all events, might have indicated when the time would arrive for considering the claims of the Graduates, as they might not have been found either precipitate or unreasonable, had they had any fair assurance on this point.

Mr. Quain, LL.B., moved, and Dr. Mackenzie seconded, the second resolution.

"That this meeting recommends that the following Declaration be signed by the graduates, viz.:—

"'That one great principle recognised by the Government on the foundation of the University of London, was to accord to the new University "an equality in all respect with the ancient Universities, freed from exclusions and religious distinctions."

"'That, according to the present Constitution of the University of London, the Senate forms the Corporate Body, and not only administers all its affairs, but has practically a large power of altering its Constitution by petitioning for and accepting such new Charters as Her Majesty may be pleased to grant.

"'That the Members of the Senate not being connected with the University by education, have a less direct personal interest in its prosperity than those dependent on it for their academic rank.

"'That the Graduates are the persons chiefly interested in the welfare and honorable reputation of the University, yet have no corporate existence, and are not admitted to any voice in University affairs.

"'That while the undersigned acknowledge, with gratitude, the services rendered to the University by its founders and present authorities, and admit that some Constitution like the present was necessary at its outset, they are convinced, that such a Constitution was not intended to endure beyond the time when the number of the Graduates would afford the materials for establishing the University upon a wider and more permanent basis.

"'That the undersigned are of opinion that the lapse of further time will not tend to secure a more efficient assembly of Graduates, as every year is, in their present unorganised state, loosening the connexion between the holders of degrees, weakening their interest in the University, and lessening their knowledge of its affairs.

"'That, as the number of the Graduates now amounts to 546, and the number of Undergraduates to 802, including 112 who have passed the first Examination for the degree of Bachelor of Medicine, the undersigned consider that the time has now come when they may justly claim to be no longer excluded from the body corporate of the University.

"'That the fact that the Graduates do not possess any power or collective voice in the University tends to impair the value of their degrees, and to lower their social standing as compared with that of the Graduates of the other English Universities; and that a change of constitution in this respect is likely to secure for their degrees a higher and more widely-spread reputation.

"'That the simple admission to the present Senate, of individual Graduates, is not, in the opinion of the undersigned, calculated to secure all the advantages which would result from investing the Graduates with corporate powers.

"'The undersigned, therefore, earnestly desire that such a change may be made in the Constitution of the University as shall at once admit the Graduates into the Corporate Body, with such share in its government as may be deemed proper.'"

Mr. Smith Osler, LL.B., in moving the third resolution, which was seconded by Mr. Greenwood, B.A., impressed upon the graduates that, while the discussion proceeded between the Committee and the Senate, individual graduates had less power of aiding the movement. Now all their exertions were wanted. He particularly called attention to the importance of inducing the Colleges of the University, through their authorities, to make representations to the Senate. He moved,—

"That the Graduates, while they regret the indisposition of the Senate to assist them, pledge themselves to continue their exertions to attain their proper position in the University, and authorise the Committee to take such steps as they shall judge best calculated to accomplish this object."

Dr. Brinton and Dr. Manson moved and seconded the fourth resolution.

"That the Committee be instructed to press the claims of the Medical Graduates upon the Legislature, in the event of any changes being contemplated in the existing constitution of the Medical Profession."

Dr. Savage and Dr. Routh moved an amendment, calling on the Committee to put themselves in communication with the College of Physicians and other medical bodies. They entered into long statements of their own endeavours to induce the Committee to take this course. They had also applied to the Senate on the subject, no notice having been taken of the matter in the Draft Scheme for a new Charter, submitted to Sir George Grey by the Committee.

Dr. Storrar stated what had been done. The Bill of Sir James Graham had been referred to a Select Committee, of which the Lord Advocate was Chairman. The claims of Oxford and Cambridge, whose position as regarded the faculty of medicine was insignificant, compared to that held by the University of London, had been urged before the Committee. Nothing was done by the Senate till the Graduates moved. The Committee had induced the Senate to enter a caveat against the new Charter claimed by the College of Physicians, to depute Drs. Billing and Hodgkin, to be examined before the Parliamentary Committee, and to send a Deputation to Sir George Grey. The Committee had also sent him (Dr. Storrar) and Dr. Barnes, to be examined before the Lord Advocate's Committee, and had themselves sent a Deputation to the Home Office. The Committee had also brought to light a letter from Lord Monteagle, when Chancellor of the Exchequer, to the Council of University College. This letter contained the contract made between Government and University College, when the latter gave up its claim to be made a University. It was then agreed, on the faith of the Government, that the new University should have equal privileges with Oxford and Cambridge. Sir G. Grey admitted the contract. Sir J. Graham's Bill was not proceeded with, and the Committee were now looking for a promised Bill of the Lord Advocate this Session. These were the claims of the Committee to confidence. It was quite true they had not made terms with the College of Physicians. The reduction of fees which could have been obtained was very inconsiderable, and the College would still have required two out of their present three examinations. This would not have placed London Graduates on a par with those of Oxford and Cambridge. They would have insisted on extending their power over England and Wales, thereby imposing burdens on country Graduates, from which the latter were at present free. Equality with Oxford and Cambridge, as guaranteed by express contract, was the principle of the Committee. Obtaining that, and regard for the dignity of the University imperatively required them not to make such terms as were alone within their reach with the College of Physicians.

The resolution was then passed, only three hands being held up for the amendment.

Mr. Bagshot, M.A., and the Rev. R. H. Hutton, M.A., then moved a resolution, expressive of regret that the Senate had accepted a supplemental Charter last June. By that Charter they were empowered to confer certificates of proficiency in mere specialities on men who were not graduates, and who had not obtained a liberal education. This was inconsistent with the character and position of a University. Mere licentiates in practical engineering, mining, and such like, ought not to be identified with it. The University required from graduates in Law and Medicine, that they should have passed introductory examinations showing that they were men of liberal education.

The resolution was supported by Messrs. Case, M.A., Roscoe, B.A., and Robson, B.A., and excited the greatest interest among the graduates present, but owing to the lateness of the hour, and the previous departure of many of the graduates, Mr. Bagshot consented to withdraw it.

After a vote of thanks to the Chairman, which was carried by acclamation, the meeting separated.

REVIEWS.

Medico-Chirurgical Transactions. Published by the Royal Medical and Chirurgical Society of London. Vol. XXXII. 1849.

The present Volume of the Society consists of only 178 pages. It contains a very indifferent paper by Dr. Basham, on the employment of Nitrate of Potash in Acute Rheumatism. "One, two, or even three ounces of the nitrate, freely diluted, (*i. e.*, about 1 oz. to 1 qt. of water,) may be taken in the twenty-four hours in cases of acute rheumatism." No one can accuse Dr. Basham of coqueting with homœopathy. A good account of Dr. Semelweiss's Observations on the causes of the Puerperal Fever of Vienna, by Dr. Routh. An able paper by Mr. Rainey, on the Minute Anatomy of the Lung of the Bird.

A third paper, by Mr. Toynbee, on the Diseases of the Ear; if possible, excelling his former Essays in intrinsic value; and some lengthy remarks by Dr. Webster, on the Causes and Morbid Anatomy of Mental Disease.

Dr. Garrod has contributed a short paper, containing the important announcement, that he has discovered oxalic acid in the blood of a man suffering from chronic hiccup and vomiting.

In addition to the above, the Transactions contain some four or five extraordinary or ordinary cases, which would have been as appropriately placed in the pages of a weekly Journal.

CORRESPONDENCE.

ERRATA.

THE WESTMINSTER MEDICAL SOCIETY.

LETTER OF SIR B. BRODIE.

[To the Editor of the Medical Times.]

SIR,—A friend has just now called my attention to an article in the *Medical Times* of this day, purporting to be a report of observations made by myself at a meeting of the Westminster Medical Society, relating to a subject which was then under discussion.

Your reporter has laboured under a mistake. I have not been present at a meeting of the Westminster Society for a long time past; and I never made the observations to which I allude.

I am, Sir, your obedient servant,

B. C. BRODIE.

14, Saville-row, Feb. 23, 1850.

LETTER OF MR. HAYNES WALTON.

[To the Editor of the Medical Times.]

SIR,—In the report of the proceedings of the Westminster Medical Society, published in your last Number, there is a notice of my having spoken; and so gross is the misrepresentation of the parts of my speech to which it refers, that I feel it necessary to correct it. I am made to say, that *I consider the danger in fistulous sores rather to depend on the probable extension of the disease into the prostate.* It should be, "That a patient, with perinæal fistulæ, is by no means free from attacks of retention of urine, and its immediately attendant dangers; but, that the greater evil is the increase of the almost certainly existing disease of the prostate and bladder. *In hospitals the catheter is often passed for a long time uselessly; therefore, after a fair trial, if a cure be not effected, the operation should be performed.*" "My knowledge of these cases is derived from hospital practice: until there is a passage for the urine by the natural channel there can be no true amelioration in the patient's condition; and I assert my opinion, that after proper, sufficient, but ineffectual attempts to enter the bladder, our patient's welfare is best attended to by making a perinæal division of the stricture." *It is not, however, more dangerous than lithotomy.* "It is not equal in severity to lithotomy, nor is it as dangerous, in which the principal danger is connected with the removal of the stone from the bladder." *The operation of cutting is advisable where a catheter can be introduced, if the stricture be undilatable.* "But I do think, where we have a stricture that is next to impassable, the patient suffering severely from the use of the catheter, the general health breaking, the urinary apparatus posterior to the stricture diseased, the sooner the perinæum is opened, and the canal established, the better for the unfortunate sufferer." *He desired to hear Mr. Wade's opinion on these cases:*—"I do not consider myself entitled to speak on the use of caustic potash in the treatment of stricture, except to abuse it. Of its efficiency, I have had no experience; of its mischief, several examples. I should like to hear Mr. Wade's opinion on the subject."

I am, Sir, your obedient servant,

HAYNES WALTON.

LETTER OF MR. WADE.

[To the Editor of the Medical Times.]

SIR,—In your report of the discussion on Mr. Smith's paper, upon "Division of Strictures by

Perinæal Section," I am represented as having mentioned the ever-to-be-respected name of the late Mr. Aston Key as an authority for the caustic treatment in a case of impermeable stricture. The truth is, that, when arguing against the operation for division of a stricture by perinæal section,—an operation at present, unfortunately, too much the fashion,—I described that proceeding as one of a most serious character, as having occasionally proved fatal, which could not, in the generality of instances, be depended upon as a permanent cure of the disease, and which, therefore, could only be justifiable in cases of immediate or impending danger. I also stated, that the best surgeons in this country resorted to the operation only after the failure of all other means, unattended with risk to life, except in urgent cases, where the bladder must be immediately relieved at all hazards. I then alluded to a consultation which I had with the late Mr. Key, a few weeks before his lamented death, upon a bad case of impermeable stricture, complicated with a false passage, when he was strongly urged by the patient to divide his stricture, but declined performing such an operation, stating, that, according to his experience, it was one of a very hazardous character, and most unsatisfactory in its results. Mr. Key thought, at first, that there might be a possibility of dilating the stricture by the occasional introduction of a small sound; but, having failed with that instrument, its introduction on one occasion, having caused rather a severe hæmorrhage, he recommended the gentleman to go into the country for a short time to recruit his health, and then to place himself under my care, that the potassa fusa treatment might have a fair trial, of which treatment, however, Mr. Key had no experience of his own, never having employed that remedy in stricture. I had no intention of shifting the responsibility of recommending the employment of the caustic alkali in bad cases of stricture upon others, being well content to take all such responsibility upon myself. Justice to Mr. Key requires this explanation, and I should be truly sorry if any words of mine, being misunderstood, were constructed into a misrepresentation of the views of that admirable surgeon and excellent man.

I am, Sir, your obedient Servant,
R. WADE.

68, Dean-street, Soho, Feb. 27, 1850.

[Common honesty obliges us to publish the above letters; and we have to offer, both to our readers and to our correspondents, many apologies for the errors that inadvertently crept into our last report of the proceedings of the Westminster Medical Society. The fact, however, is, that our reporter—who hitherto, we are happy to say, has given much satisfaction to the Profession—was unable to be present in consequence of severe illness. Unwilling that the Society's proceedings should be passed over in silence, he procured the services of another gentleman to furnish the report. Sir Benjamin Brodie was not present at the meeting, nor is he in any way responsible for the opinions attributed to him. The paragraph commencing with Sir Benjamin Brodie's name, and made to appear as his *ipsissima verba*, in fact formed part of the address of the preceding speaker, Mr. Childs, and was merely given by him as the opinion of that eminent authority with regard to cutting for stricture.

We deeply regret that this typographical error should have caused any annoyance to the worthy Baronet.—ED. *Medical Times.*]

THE ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

[To the Editor of the Medical Times.]

SIR,—Permit me to correct a slight error in your last report of the proceedings of the Medico-Chirurgical Society. It is there stated that I did not believe the advantage derived from the use of cotton in cases of perforated membrana tympani "ever depended on the perforation being covered by the pellet." This is not my opinion, for in those cases (and they appear to be comparatively few) where the power of hearing has been improved by the use of the cotton, the latter substance, as stated by Mr. Yearsley, required to be applied with great nicety, so that where there is a small orifice in the membrana tympani, it may be completely filled by the pellet; and when the entire membrana tympani is absent, the cotton must be placed as near as possible in the situation which it occupied. In one case under my care several years since, the pellet of cotton required to be passed about half a line through the orifice, of which, when removed, it presented a cast. It is of importance that medical men should remember that a simple aperture in the membrana tympani causes scarcely any inconvenience. Sir Astley Cooper having ascertained this fact, was induced to suggest the operation of puncturing the drum in supposed cases of stricture of the Eustachian tube. In those patients where the amount of deafness is diminished by the application of cotton wool, it appears that some other diseased condition co-exists with that of the membrana tympani.

I beg to add a word in reference to the subject of enlarged tonsils. I stated that I not unfrequently saw patients where the ear on the same side with a tonsil greatly enlarged, was not at all, or very slightly affected, at the same time the opposite ear was very deaf, and the corresponding tonsil was not at all enlarged.

I am, Sir, your obedient servant,
JOSEPH TOYNBEE.

12, Argyll-place, Regent-street, Feb. 25, 1850.

ABERDEEN DEGREES.

[To the Editor of the Medical Times.]

SIR,—I observe in your number of the *Medical Times* for Saturday last, or the Saturday preceding, a letter bearing reference to the mode of granting degrees of M.D. at the University of Aberdeen, and more particularly alluding to one case, in which an individual arrived in the afternoon of Wednesday, and left on the following day with the degree of M.D.

The person who wrote that letter is either grossly ignorant of the mode of procedure, or is willingly misrepresenting it. You must be aware, from the advertisements which have from time to time been inserted in the *Medical Times*, and one of which will appear in the number for Saturday, March 2, that degrees of M.D. are not conferred at this University unless the candidate submit to examinations, he having produced to the senators the necessary documents to show his standing in the Profession, and having, subsequent to that, obtained permission from the senators to become a candidate. I trust that, in any remarks that may be made on this subject, you will correct the misrepresentation that has been committed.

I am, yours respectfully,
Aberdeen, Feb. 19, 1850. ANDREW FYFE.

THE HUNTERIAN ORATION.

[To the Editor of the Medical Times.]

SIR,—I must beg to disclaim any unbecoming agitation, and any intention of offering an "unmanly insult, on a great public occasion," to Mr. Skey, as you were pleased to term the few observations which I addressed to the assembled members prior to his entrance into the theatre.

I am personally unacquainted with Mr. Skey, and entertain no ill feeling towards him individually. It was, however, because the occasion was public, and the only one on which the body of the members and the Council can meet, that, in my opinion, some marked disapproval of its conduct was called for.

What other fitting opportunity is there, I would ask, for the "expression of feeling in a legitimate manner?" Have not all the representations of the members been on all occasions disregarded, and their claims to redress of abuses disdainfully rejected, so as to produce a sentiment of exasperation throughout the right-thinking portion of the Profession?

I will only add, that having decided to leave town on the day of the Oration, my attendance was accidental, and the remarks made, on the spur of the moment, were, I conceive, fully justified by the occasion.

Trusting that your sense of justice will cause the insertion of this note in your next Number,

I am, Sir, your obedient servant,
EDWIN LEE.

London, Feb. 25, 1850.

HANWELL LUNATIC ASYLUM.

[To the Editor of the Medical Times.]

SIR,—The observation I made in my letter of the 16th inst., published in your Journal, on the use of mechanical restraint at the Hanwell Asylum, is founded upon my own personal observation when I last went round that Institution, which cannot be more than three years ago. At that time I did not go by myself, and I doubt not the gentleman who went with me will be able to confirm what I now state. It was on the male side, and, therefore, Mr. Hitchman, being the resident Medical Officer of the female department of the Asylum, may not be in a position to contradict the assertion I make; but I cannot be mistaken about the facts. The attendant who accompanied me round, observed, that he supposed I had no wish to go into the refractory gallery, where the more violent patients were; and my reply was, I wished to see everything. When I entered that gallery, which was of a semicircular form, badly lighted by a dome-light from the top of one of those central turrets which Hanwell is rather celebrated for, I saw three or four patients walking up and down, having a dress on that was like a very short round frock, and to the sides of this jacket, or frock, the hands were secured,—I will not be positive in what way, but I think it was by a small padlock. At any rate, the hands were fastened so that they could not be undone by the patient; and I observed, that the arms being in a position straight with the body, they were less likely to be comfortable in that position than in the old semiflexed one.

Now this was at a time when the general impression on the public mind was that no restraint of a mechanical nature applied to the person of the insane was in use at that Institution. Dr. Conolly, I doubt not, at that time had learnt that, even in the matter of mechanical restraint, there was a line of distinction to be drawn between use and abuse; though he had endeavoured to persuade the public there was no use even in mechanical restraint, he was driven, in practice, to admit there were cases where no other kind of restraint could be useful or benevolent. And with every desire to give the praise due to him for having so nobly opposed the abuses into which this method of treatment had been permitted to fall, I cannot believe he really thinks there is no use in such a method; and I am much deceived if he is not aware that it is continually resorted to by the attendants at Hanwell. He may not openly approve of it, but he cannot prevent it; and my belief is, that many of his own cases are so treated, though he may not be aware of it.

I am, Sir, your faithful Servant,
A PHYSICIAN AND RESIDENT PROPRIETOR.

Feb. 25, 1850.

[The writer of the above has favoured us with his name.—ED. *Medical Times.*]

THE POLAR EXPEDITION.

[To the Editor of the Medical Times.]

17, Saville-row, 18th Feb., 1850.

SIR,—The period having arrived when a search may be made for the Franklin expedition by an overland journey across the continent of America, I am anxious to refer my Lords Commissioners of the Admiralty, for reconsideration, to my plan, dated Feb. 1848, and published in a return to an address of the Honourable the House of Commons of the 21st of March following.

The opinion of Captain Sir E. Parry, published in that return, was highly favourable to the position I assigned to the lost expedition—the western land of North Somerset, and to the mode in which I proposed to reach it (by the Great Fish River;) but the gallant and intrepid officer, "agreeing thus far, was compelled to differ with me as to the *readiest mode* of reaching that coast, because he felt satisfied that with the resources of the expedition then equipping under Sir J. Ross, the energy, skill, and intelligence of that officer would render it a matter of no very difficult enterprise to examine the coast in question with his ships, boats, or travelling parties."

In the plan to which I am now asking their Lordships' reconsideration, this question, which I premised might be raised, is thus argued by me: "Does the attempt of Sir J. Ross to reach the western land of North Somerset in boats from his station in Barrow Strait, render that proposal unnecessary? (to reach the western land of North Somerset by the Great Fish River.) Here the facts will speak for themselves: 1st, Barrow Strait was ice-bound in 1832; it may, therefore, *be ice-bound in* 1848. 2nd, Sir J. Ross is using the same means to relieve Sir J. Franklin which have led the gallant officer into his difficulty; the relief party may, therefore, become a party in distress. 3rd. The land that is made on the south shore of Barrow Strait will be of doubtful character, the natural consequence of discovery in ships; the searching party, at the end of the summer, may therefore find they have been coasting an island many miles distant from the western land of North Somerset, or navigating a deep bay, as Kotzebue navigated the sound named after him, and as Sir J. Franklin navigated the sea called Melville Sound.

"The plan which I have proposed is, to reach the Polar Sea across the Continent of America, and thus to proceed from land known to be continent, where

every footstep is sure. If that plan be laid aside, the lives of our lost countrymen will *depend upon a single throw*, in the face of almost certain failure."

This only point of difference between Sir E. Parry and myself in 1848, is now, in 1850, at an end. Barrow Strait *was ice-bound. The single throw fell far short of its mark. Captain Sir J. Ross failed in affording the least succour to the lost Expedition*, and I am thus spared the painful necessity of replying to the gallant officer's remarks expressed to their Lordships, in no measured terms, upon that plan which, in fact, Sir E. Parry has done for me—the plan of one who learnt his lesson in active discovery in an overland journey in search of the gallant officer when the whole civilized world was as anxious for his fate as it is now for the gallant Sir J. Franklin.

All that has been done by way of search since February, 1848, tends to draw attention closer and closer to the western land of North Somerset as the position of Sir J. Franklin, and to the Great Fish River as the high road to reach it. Such a plan as I proposed to their Lordships in 1848 is, consequently, of the utmost importance. It would be the happiest moment of my life—(and my delight at being selected from a long list of volunteers for the relief of Sir J. Ross was very great)—if their Lordships would allow me to go by my old route, the Great Fish River, to attempt to save human life a second time on the shores of the Polar Sea. What I did in search of Sir J. Ross, is the best earnest of what I could do in search of Sir J. Franklin.

That the route by the Great Fish River will sooner or later be undertaken, in search for Sir J. Franklin, I have no doubt. That high road to the land where I have all along maintained that Sir J. Franklin would be found, and in which opinion I am now associated with many others, including Sir E. Parry himself, cannot much longer be neglected.

For some time past it has been the cry, even in the highest official quarters, that the Government will not again attempt the discovery of the North-West Passage, and the fate of Sir John Franklin is invariably referred to as an example of the fruitlessness of such an attempt.

The fruitlessness of Sir J. Franklin's attempt ought not entirely to discredit the service in which he has been engaged, but rather to awaken us to the grievous error committed in the instructions which he received, and upon which it is impossible to look back without the most painful feelings. The gallant officer was, in fact, instructed to lead a forlorn hope. The discovery of the North-West Passage is the certain result of so overwhelming a catastrophe.

In the absence of authentic information of the fate of the gallant band of adventurers, the *terra incognita* of the Northern Coast of North America will not only be traced, but minutely surveyed, and the solution of the problem of centuries will engage the marked attention of the House of Commons, and the Legislative Assemblies in other parts of the world. The problem is very safe in their hands; so safe, indeed, that I venture to assert, five years will not elapse before it is solved.

I may be allowed to state, in urging my claims to conduct an expedition down the Great Fish River, whenever such a service is determined by their Lordships, that, in addition to my intimate knowledge of that stream, I persisted, almost single-handed, for several years prior to the discovery, for three most important features of the Northern Coast of North America, the Peninsula of North Somerset, the Great Bay of Simpson, and Cape Britannia, all of which are now established geographical facts.

I have, &c.,

RICHARD KING.

To the Secretary of the Admiralty.

MR. ROSS IN REPLY TO DR. TURLEY.

[To the Editor of the Medical Times.]

SIR,—Dr. Turley's letter, commenting upon my "Observations on the recent Epidemic," is such a singular concoction of jest and science, that it is exceedingly puzzling to know how to reply to it in a becoming manner. He deals so funnily with a serious subject, that I should imagine him to be a very odd kind of psychological curiosity. If he desire me to understand that his science is all a jest, I can easily accept it as such, but I certainly cannot consent to his jests being received as science. He can find no wiser argument for the preference of common salt to saltpetre in the treatment of cholera, than that it is better that the patient should be oversalted than undersalted in the curing process. I can advise Dr. Turley better still; it is, that he take his salt out of his physic, and put it into his wit, and both will be improved.

I cannot, however, find time to bandy jests with Dr. Turley;—more especially as he has brought a string of allegations against me, which, if they were worth answering, would require a rejoinder as long as the brief of a Chancery barrister. The main scope of his letter is to fix upon me the charge of *inconsistency*; and, although, in this instance, I deny its justice, yet I boldly tell him, that the highest merit that any man can possess in my estimation, is to have virtue enough to be inconsistent. In my intercourse with men, I urge evermore, that every man should speak his present thought, and make a clear way for the truth that is in him. Sincerity is better than knowledge, and is the chief of virtues. The candour of childhood, and the wisdom of age, are the chief ornaments of character, and if a man grow old without retaining the one, or acquiring the other, he is, indeed, to be pitied. We may do very well without wisdom, but not without sincerity. Though a man should contradict himself, let him not be ashamed: he will be the wiser and the better for it in the end. If he must speak, let him not lie to himself. The responsibility of telling the truth now and always will make him wise in due time. I think, if Dr. Turley had observed this rule, he would not have written his letter.

Dr. Turley says that, in my lectures, I condemned Dr. Stevens's saline mode of treatment, and praised Dr. Marsden's, both "being actually the same." The fact is, that I collected certain official reports, in one of which—that of the Greville-street Dispensary, a positive distinction was drawn between the two modes, by placing the mortality resulting from each in separate lines of the Table. Had I altered this arrangement I should have dealt dishonestly with the Table, which implied an actual difference between the two modes of treatment. But, Dr. Turley says, that they are the same. In that case, it is not I, but Mr. De Grave, the reporter, who is guilty of the misrepresentation. It is by no means clear to me, however, that Dr. Stevens aided by any fixed formula of salines in the treatment of his cases. Dr. Turley himself states, in one of the letters of his last correspondence, that the quantity of the muriate of soda in the formula, ranged from a scruple to a drachm, and this salt is, confessedly, the most important ingredient of the mixture. It is very certain that, whatever may appear to be the case in print, the relative quantities of the components of Dr. Stevens's prescription were not fixed in practice. Whatever may be the importance of this matter, the quarrel rests between Dr. Stevens and Mr. De Grave, and I repudiate all connexion with it, and all responsibility of settling it. The case between Dr. Turley and myself stands thus:—

Dr. Turley: "He who, in his lectures, condemned the saline treatment of cholera of Dr. Stevens as the *worst method possible*, and in the same Third Table, praised the saline treatment of Dr. Marsden, at Greville-street Hospital, as *the best possible*," &c.—Letter, Jan. 27, 1850.

Mr. Ross: *It would appear*, that Dr. Stevens's combination of salts was highly injurious, the mortality being as high, under his plan, as 76·3 per cent. I find, too, that it has been *very often* condemned *by gentlemen who have employed it*. On the other hand, the Greville-street combination *would seem* to be as highly beneficial, 14 per cent. being, under this system, the rate of mortality."—Lecture *Medical Times*, Nov. 25, 1848.

There is no confident opinion expressed here either of praise or blame. These expressions are merely inferences from the Tables, which *may appear* and *seem* to be correct, and nothing more. The fact was yet to be decided, and, for all Dr. Turley could know at that time, my personal opinion might have been just the opposite of what he has so boldly asserted. Greater caution in stating the case to the Profession could not have been shown.

Dr. Turley: "He subsequently said, that the saline treatment was *the best* method of cure *possible*."—Letter, Jan. 27, 1850.

Mr. Ross: "I *have no wish to disparage* the saline system of treatment; on the contrary, *I believe* it to be *the best yet tried*, and would recommend it as such; at the same time, it is my duty to *state facts faithfully*, regardless of any apparent contrariety that may appear in the evidence."—Letter, *Medical Times*, Dec. 23, 1848.

The above is the sentence referred to by Dr. Turley. I did not say that the saline treatment was the best possible. Such an expression, delivered dogmatically, could have come only from a madman or a fanatic. "There be more things in heaven and earth, Horatio, than are dreamt of in your philosophy;" and I humbly subscribe to the wisdom of this sentiment. What I did write was, that I *believed* it to be the best *yet tried!* a very different matter. The caution exhibited again in this sentence is very remote from the potential dogmatism which Dr. Turley has, without compunction, ascribed to me.

Dr. Turley: "For the sake, then, of his 'excellent friend,' Dr. Stevens, he uses his treatment, excepting that he omits the recipe of Dr. Stevens," &c.—Letter Jan. 27th, 1850. (Here follows in the letter, an original and remarkably clever joke about the character of Hamlet being left out of the play of that name in its public representation.)

Mr. Ross: "Being desirous of trying the *saline plan recommended* by my excellent friend, Dr. Stevens, I employed it in *all* my *first cases*; not, however, alone, but generally aided by other remedies. I *rarely* administered other agents until I feared that the saline plan was incompetent to the cure. I was unable to administer the saline remedies in the form recommended by Dr. Stevens, in consequence of the predominance of common salt, which was offensive to the patients, and caused the remedy frequently to be set aside. I, therefore, devised," &c.—*Medical Times*, Jan. 26, 1850.

If there be any ambiguity in these sentences it is only apparent; for I expressly say that I tried Dr. Stevens's saline plan in all my first cases; and, although I state that I devised another formula, it was because my experience of Dr. Stevens's plan informed me that it was *offensive to the patients*, and practically useless. It would have been only fair, however, for Dr. Turley to have referred to my letter, published in the *Medical Times*, Sept. 15, 1849, in which I first announced the treatment by *nitrate of silver*. He would there have found this sentence:—

Mr. Ross: "I began my operations against this epidemy by the employment of salines, with the fullest reliance on their efficacy; and exhibited chiefly common salt, at short intervals, in *the combination recommended by Dr. Stevens*."

Dr. Turley has certainly a charming facility at misrepresentation. Here is another of "Turley's own:"—

Dr. Turley: "Nevertheless, he found the majority of his early patients die, after being *helped* over the collapse by his own salines, from the consecutive fever."

My opinion, in this sentence, takes an affirmative form. The sentence assumes that the salines helped the patients over the collapse.

Mr. Ross: "The greater number of my early cases died in the consecutive stage, and I was *inclined to think* that it was owing to the salts, which helped the patients over the collapse, but were unequal to accomplish a final cure,"—"with the exception of the *apparent* advantage above stated, I could perceive no *probable* benefit from their use."

I was inclined, and no more, to give credit to the salines for helping the patient over the collapse; but this notion had so little hold on my mind that, as Dr. Turley admits, I had no reliance upon it, and felt it right to adopt more active remedies. Is there any rational man that can discover any impropriety in this conduct? Had I lost my right to employ nitrate of silver because it might be just probable that salines effected a partial good? The Doctor is a sensible man, I doubt not, but he wants the skill to show it.

Dr. Turley's allegations are of so contemptible a character, that I do not desire to prolong this letter by noticing them *seriatim*; but there is one assertion made by the Doctor that surpasses all the others in its unmitigated hardihood. Thus it runs:—

Dr. Turley: "He also admitted the *truthfulness of the Tables*, open now to the public at the Coldbath-fields prison, and verified by the Governor there and the visiting magistrates in 1832."

Has Dr. Turley really forgotten my brief letter, written in reply to his long epistles in the spring of last year? That letter contained this sentence:—

Mr. Ross: "The question, then, is, *Are Dr. Stevens's Tables worthy of reliance?* I found them *doubtful*, and, without seeking to revive the discussion, declined to use them. Notwithstanding your very able pleading for the Doctor's talent, experience, and integrity (whose possession of these high qualities I am prepared to admit,) I still believe that the credit of his Tables remains impeached."

Subsequently to the period of my writing this letter Dr. Stevens came to town, and I had the pleasure of an interview with that gentleman, who submitted to me all the documents relating to the question. I thereupon published a letter, bearing date the 5th of June, 1849, in the *Medical Times*, in which, after paying Dr. Stevens such a compliment as I believed his virtues merited, I wrote thus in reference to these Tables:—

Mr. Ross: "As a lasting reputation can, however, be based only on truth, its claims are rather damaged than strengthened by *doubtful* evidence.

If Dr. Stevens's views are correct, as I have no doubt they are, it is *unwise* to profess that they must stand or fall by the evidence of the practice in Coldbathfields."—Letter, *Med. Times*, June 5, 1849.

Stronger language than this in favour of these Tables I have never written; and how any individual can dare to assert that I have admitted their "truthfulness" surpasses the possibilities of comprehension of any ordinary mind. There are several other gross inaccuracies in the Doctor's letter, introduced, doubtlessly, for the purpose of giving body to his vapid arguments, and pointing his stale jests; but they do not deserve from me further remark. Dr. Turley and myself entertain very different ideas of the dignity of science; and, perhaps, it is for this reason that I am incapable of appreciating the frothy feebleness of word-catching and double notes of admiration, as the exponents of sincerity and a temperate inquisition on truth.

Now, Sir, I have carefully abstained, both in my lectures and papers, from writing a word that might wound the susceptibilities of Dr. Stevens; but, if I am urged much more upon this frivolous question, I shall be constrained, in self-defence, to give to the Profession my unreserved opinion upon this paltry squabble, together with the grounds—derived as much from conversations with Dr. Stevens as from Dr. Turley's letters—for forming that opinion. This unamiable strife cannot possess interest for the Profession, and, what is more material, cannot advance the cause of truth.

Dr. Turley has stated, that it is not his intention to reply to me, and I hope he will abide by so good a resolution. I do not forget, however, that one line, flanked by an unassuming, timid, quiet, little note of admiration, elicited from him, on a former occasion, eight long and tedious letters, written in a manner "that the learned call rigmarole," and so closely printed, that, if spread out in the ordinary form, they would have constituted a goodly volume. Heaven spare me and your readers from such another infliction! What will become of me by the time he has finished his philippics, I cannot conceive! The Doctor began his correspondence with me by disguising a small quantity of censure in a large proportion of compliment: he has now reversed the order, and, whilst his compliment has become infinitesimal, his reproaches have dilated to an enormous magnitude; I presume, that, if the correspondence be continued, I shall be cast out with the *anathema maranatha* of this despotic Doctor upon my head. Well! I can patiently abide the result, for I care not how many blows I suffer in defence of truth.

If, however, the Doctor should be tempted to write again, I trust that he will show more veracity, modesty, and candour,—for he will find that his arguments cannot afford to dispense with these important auxiliaries. His jests may be very good, but I suspect that the Doctor is himself the best judge of his own jokes; and, if his vanity have any misgivings, he will do wisely to forward his witticisms to the Prompter at Sadler's Wells, for that worthy's revision, before he give them publicity. It may then be worth his while to consider, whether the corner devoted to "Odds and Ends" in a provincial newspaper, may not be a more suitable receptacle than the pages of the *Medical Times*. It is full time that Dr. Turley and myself should understand each other, and decide for what we are contending. Is it practical truth, or private character, that is the point at issue? Let there be no mistake upon this matter.

With respect, Sir, to my own views of the treatment of cholera, I shall revert to them no further than to reiterate my conviction of their importance, and to recommend them most earnestly to the consideration of the Profession.

I am, Sir, your most obedient Servant,

GEORGE ROSS.

24, Farringdon-street, Feb. 23, 1850.

CORONERS' INQUESTS.

[To the Editor of the Medical Times.]

SIR,—I was much pleased at finding you intimating, in your last Number, the desirableness of connecting a reform in the Coroner's Court with any new sanitary legislation that may be forthcoming. I do not exactly agree with you as to the mode in which this should be accomplished, and shall feel obliged by your allowing me to state my opinions upon the subject, as the present appears a very opportune time for examining the question, in its bearings upon the interests of the Profession and the public.

In the first place, then, I have no hesitation in expressing my opinion that this tribunal should be forthwith abolished, placed, as it has become by the progress of time, in that category of our institutions, which, in their day, have done good service to the State, but whose functions may now be discharged by means of a simpler and more effectual organisation.

In an early and rude stage of society, when police organisation was very defective, and in its modern preventive modification did not exist; when human life was far less secure, and crime much more difficult of detection, an assemblage of a certain number of the inhabitants of a locality to investigate the causes of suspicious deaths, formed as good a tribunal as the period admitted of, especially as the limited amount of their qualifications prevented the Medical Profession from rendering society much special assistance in this class of investigations. But now that the escape from the consequences of crime has been rendered so much more difficult by the very effective state of police organization, and the great progress of medical science, the retention of a machine so cumbrous in its structure, and so unsatisfactory in its working, seems unadvisable. An active and well-distributed police, and a responsible magistracy, would seem to offer every security that no case of suspicious death would go uninvestigated; but this may still farther be provided for by means which I will presently suggest. At present a Coroner's inquest in important cases is a mere work of supererogation, its decisions not being final, and only having the power of compelling a trial which other means also secure; and that, even supposing the verdict of the Coroner's Jury does not indicate its necessity. On the other hand, in how many cases the inquest is perfectly uncalled for,—a mere foolish matter of form,—cases in which death has obviously resulted from natural causes. In other cases, again, through the prejudices or ignorance of the jury, it becomes an instrument of the grossest oppression, or the means of recording the most inconsistent and ridiculous verdicts.

This is just what, *à priori*, might be expected. A body of tradesmen, assembled from the immediate locality, and hence inoculated with its prejudices, often acquainted with or on bad terms with the witnesses or the accused, and usually profoundly ignorant of the really important points upon which the case will hereafter have to be decided, scarcely form a tribunal whose decisions would be likely to be impartial and command respect. Yet the verdict of these men may blast a character for ever, or may condemn to a prolonged imprisonment. So serious a power as that of incarceration should never be wielded, but by persons who are acting under a sense of direct personal responsibility, holding their offices only upon the condition of an able and upright fulfilment of their duties. It is a poor consolation for the victim of an unjust or foolish verdict, that, after long delay and much expense, it has been quashed; or that he should hear a judge (as recently) while directing his acquittal, express indignation that he had ever been placed in a position requiring this.

It may be said, and with truth, that, in the great majority of cases, the jury merely put into legal form the opinion given or hinted at by the Coroner. But why retain so cumbrous a machine for giving expression to this? And then, again, although the Coroner is usually an educated man, (in many provincial districts only slightly so,) and *pro tanto* more likely to direct a more reasonable verdict than the jury without his aid would be able to return, yet even coroners have been known to entertain inveterate prejudices and acquire a most unfair bias, while, from the mode of their appointment, there is no security that they possess any special qualification for the office whatever. A mere smattering of medical or legal knowledge is almost worse than none, for it engenders in the possessor an undue reliance in his own opinions he otherwise might not entertain.

If, however, the present system of Coroners' Courts is to continue, I do not think the appointment of *Medical Coroners* a desirable step, and consider it, in some respects, an objectionable one. Several years since, (1839,) I published two letters in the *Medical Gazette*, (vols. xxiii. and xxiv.) taking this view of the question; and subsequent reflection has not induced me to alter it. A Medical Coroner places himself before the jury in the double capacity of witness and judge; for, on hearing the medical evidence recorded, he expresses a critical and professional opinion upon it, which, to all intents and purposes, is to act as a witness, and to influence the jury as one. Were means taken to assure us of his qualifications and entire competency thus to act, we might become more reconciled to what would still be objectionable; but when we know that this is not the case, and that the mere fact of his being a medical man does not imply such qualification, while yet, when his opinion ran counter to that of a medical witness, perhaps infinitely more competent than he to form one, it would yet undoubtedly prevail and be acted upon by the jury, we see the inexpediency of such an appointment being resorted to as a remedy for the abuses that prevail in the Coroner's Court. Suppose the coroner and the medical witness at issue in their interpretation of some *post-mortem* appearance, &c., a jury of butchers, bakers, &c., is the tribunal that is to decide between them!

Finally, a few words upon the substitute I would propose, in lieu of the present state of things, and in place of Medical Coroners. In the letters I have referred to, I proposed that district Medical Officers, unconnected with private practice, should be appointed, after careful examination into their capabilities and acquirements, and that into their hands should be consigned the investigation of the causes of all suspicious deaths, they conducting the various anatomical, chemical, &c., investigations. At present, whether this is done efficiently or not, is a matter of the merest chance, dependent upon whom the coroner and jury may happen to select; but, by the plan I suggested, the repeated opportunities enjoyed by these public Medical Officers would enable them to perfect their knowledge, and become valuable authorities and referees; and, as far as the Medico-legal bearings of the case were concerned, their opinions should be considered by the coroner and jury final, and acted upon accordingly. For official witnesses of this kind Medical Coroners would form no adequate substitute.

The above suggestion was made before sanitary reform was in the ascendant; but the officers in question may, very advantageously for the public form part of the corps of medical officials that will be required to work out any effectual sanitary measures. As a still greater improvement, I would, however, now recommend the entire abolition of the Coroner's jurisdiction in these matters. Let there be, as you recommend, Medical Inspectors of deaths attached to the Registrar's department, whose duty it will be, in place of parish beadles, as at present, to call the attention of the authorities to all cases of suspicious and unusual deaths; but, in place of communicating with the Coroner upon the subject, let them be empowered to demand at the hands of the district public Medical officers' reports, founded upon careful examination of the body, which reports would then be brought under the notice of the magistrates and police authorities, and any further steps that might become requisite founded upon them. So, too, in the event of suspicious cases being originally brought before the notice of magistrates, they should have the power of ordering such Medico-legal reports to be made. In this way, a tribunal so far behind the age as the Coroner's Jury might easily be dispensed with.

It may be said, that the plan I am advocating would act injuriously upon the Profession, by superseding the services they at present render before a Coroner's jury, and are remunerated for. I believe few members of the Profession place any dependence upon Coroners' Inquests as a source of income, and most would consider receipts from this source a poor compensation for their loss of time and other annoyances. Moreover, the medical men who have been called into a case, and whose testimony before a magistrate is required, should be remunerated as now he is before a Coroner; and he would simply have to resign the conducting the *post-mortem* medico-legal investigation to the officials I have alluded to. Surely the opening of these important posts to the legitimate ambition of the Profession would be a full compensation for the loss of their at present anomalous position before ignorant Coroners' Juries. However this may be with the Profession, there can be no doubt the services of fully experienced, highly educated individuals like these, would be of great importance to the public, and they should be remunerated accordingly; so that the exclusive devotion of high talent, unshackled by the ties of private practice, may be secured. Whatever functions may, indeed, be confided in future to public Medical Officers, they can only be satisfactorily performed by entirely severing them from the necessities and the temptations of private practice.

I am, Sir, your obedient servant,

Great Coram-street, Feb. 25. JOHN CHATTO.

THE HEALTH OF THE COUNTRY, IN THE QUARTER ENDING DECEMBER.

From the Quarterly Report of the Registrar-General, it appears that the deaths in the last quarters of the five years 1845-6-7-8-9, were 80,681, 108,937, 103,479, 92,447, 97,778. The rate of mortality in the quarter was 2·181 per cent.; slightly in excess

of the average rate (2·165) of the 12 December quarters,1838—49. The lowest rate of mortality (1·898) was experienced in the December quarter, 1845,—the highest (2·529) in the corresponding quarter of 1846.

If we take the complete years,—the deaths registered in the 5 years, 1845·6·7-8-9, were 349,366, 390,315, 423,304, 400,060, 441,458. The deaths in 1849 exceeded the deaths in 1845 by 92,092. The average annual mortality of the 10 years, 1838—47, was 2·213 per cent.; of the 12 years, 1838—49, 2·243. The annual mortality was lowest (2·080 per cent., or 1 in 48) in the year 1845; highest (2·493, or 1 in 40) in the year 1849.) The high rate of mortality set in with an epidemic of what was called diarrhœa and English cholera in the summer of 1846; it was succeeded by influenza at the close of 1847 and the beginning of 1848; the Asiatic form of cholera first distinctly showed itself in October, 1848, and raged in many places with great violence in the months of July, August, September, and a part of October, 1849, when it generally subsided.

The returns of the other states of Europe are still so much in arrear, that there are no means of comparing them with those of England; but it is worthy of remark, that the mortality of England in 1849, when cholera was epidemic, scarcely exceeded the mortality of France and Sweden in ordinary years, and was much less than the ordinary mortality of Saxony, Prussia, Italy, Austria, and Russia.

The following will present the Meteorological Phenomena of the Quarter in various locations:—

NAMES OF THE PLACES.	Mean Pressure of Dry Air reduced to the Level of the Sea.	Mean Temperature of the Air.	Mean Daily Range of Temperature.	Mean Temperature of the Dew-point.	Wind. Mean Estimated Strength.	Wind. General Direction.	Mean Amount of Cloud.	Rain. Number of Days on which it fell.	Rain. Amount Collected.	Mean Weight of Vapour in a Cubic Foot of Air.	Mean additional Weight of Water required to saturate a Cubic Foot of Air.	Mean degree of Humidity.	Mean Whole Amount of Water in a vertical column of Atmosphere.	Mean Weight of a Cubic Foot of Air.	Height of Cistern of the Barometer above the Level of the Sea.
	in.	°	°	°					in.	gr.	gr.		gr.	gr.	feet.
Guernsey	29·703	49·2	6·1	46·1	2·2	S.W.	...	59	16·9	3·8	0·4	0·906	3·6	538	123
Helston	29·637	48·5	11·1	45·1	1·6	S.W.	6·6	48	13·2	3·7	0·6	0·869	4·4	539	106
Falmouth	...	49·1	10·3	...	1·4	Var.	6·8	53	11·3	...	...	...	...	...	...
Truro	...	48·0	8·3	...	0·8	S.	7·2	56	15·0	...	...	...	...	...	...
Torquay	...	48·9	8·2	42·3	2·1	S.W. & E.	...	45	9·3	3·3	0·9	0·807	3·5	542	120
Exeter	29·738	46·2	13·3	42·8	1·7	N.	5·4	47	8·6	3·4	0·5	0·874	4·1	542	140
Chichester	...	44·3	10·3	...	...	S.W.& N.W.	...	...	8·4	...	...	...	...	...	...
Southampton	29·701	44·9	10·3	44·9	0·2	...	5·8	40	12·1	3·2	0·5	0·866	3·9	545	55
Beckington	29·804	43·3	13·1	40·0	...	S.W.,W.& E.	6·4	41	6·3	3·1	0·8	0·766	3·3	543	265
Royal Obs., Greenwich ...	29·687	44·8	12·0	40·0	...	S.W. & N.E.	...	49	6·6	3·1	0·5	0·859	3·7	542	159
Maidenstone-hill, Greenwich ...	29·710	44·4	9.1	44·4	...	...	6·8	49	6·7	3·1	0·5	0·866	3·7	544	...
Chiswell-street, London..	...	47·3	9·0	39·2	...	S.W.	...	38	5·7	3·0	1·0	0·744	3·6	540	...
St. John's-wood	29·709	44·8	13·0	41·4	1·7	S.W. & N.E.	8·1	36	4·5	3·3	0·5	0·883	3·7	542	200
Latimer Rectory	29·694	43·6	13·1	39·6	1·3	N.W.	6·7	44	7·2	3·1	0·5	0·873	3·6	539	335
Aylesbury	29·625	43·5	14·0	39·3	0·4	S. & N.W.	7·0	41	6·0	3·0	0·5	0·865	3·6	541	280
Stone Observatory ...	29·643	43·8	11·5	43·4	1·0	S.W. & N.E.	6·8	43	5·2	3·1	0·4	0·877	3·7	539	320
Hartwell, Aylesbury ...	29·651	43·7	...	43·7	0·9	...	...	55	7·3	3·2	0·4	0·883	3·8	541	260
Hartwell Rectory ...	29·651	43·4	12·1	38·1	0·8	S.W.	4·4	37	...	2·9	0·5	0·846	3·5	541	260
Saffron Walden	...	43·2	11·9	...	...	S.	...	25	...	...	...	...	...	...	...
Radcliffe Obs., Oxford ...	29·743	43·9	...	41·2	2·0	Var.	7·1	38	4·9	3·2	0.4	0·902	3·8	542	250
Hereford	...	42·2	...	...	...	Var.	...	42	8·6	...	...	...	...	...	...
Cardington, Bedford ...	29·785	42·8	12·3	40·6	...	Var.	6·8	47	5·9	3·2	0·4	0·909	3·8	545	200
Norwich	29·638	43·5	10·1	40·0	...	S.W.	6·9	44	9·2	3·1	0·5	0·873	3·7	544	39
Holkham	29·652	43·4	10 9	38·4	0·9	S.W.	7·0	62	9·5	2·9	0·6	0·835	3·5	546	31
Derby	...	42·1	11·6	37·5	...	...	...	56	9·3	2·8	0·7	0·827	3·3	544	...
Highfield, Notts	29·628	40·8	14·4	38·3	0·8	SW,NW,NE	6·5	60	8·4	2·8	1·0	0·827	3·5	544	103
Manchester	29·666	43 5	...	40·0	...	...	...	...	...	3·2	0·3	0·902	3·7	541	110
Liverpool Obs.	29·658	44·5	7·5	38·7	1·2	S.E.	6·0	...	10·4	3·0	0·5	0·855	3·6	544	37
Wakefield Prison... ...	29·680	42·5	12·5	37·6	...	S.W.	...	64	8·7	2·8	0·6	0·832	3·4	545	113
Stourton-lodge, Leeds ...	29·701	41·8	11·7	39·5	1·4	...	7·8	57	10·7	3·0	0·3	0·932	3·6	545	148
Stonyhurst Obs.	29·693	41·8	11·9	37·5	1·1	S.W. & N.E.	6·7	48	13·9	2·8	0·4	0·852	3·4	540	381
Whitehaven	29·574	43 9	6·6	40·7	3·1	S.W.	...	56	12·7	3·2	0·5	0·892	3·8	542	80
Durham	29·655	41·6	9·2	38·3	1·3	...	5·9	50	...	2·9	0·4	0·853	3·5	540	347
Newcastle	29·648	42·7	10·7	38·9	...	S.E. & N.W.	...	41	7·9	3·0	0·5	0·824	3·5	544	121

I. London.—The deaths in London from specified causes were 12,818; of which 3227 were by diseases of the zymotic class, 2035 by tubercular, and 2133 by pulmonary diseases. Of the deaths 494 were by cholera; 482 by diarrhœa. All except about 20 of the deaths from cholera occurred in October. 99 deaths from small-pox, 338 from measles, 486 from scarlatina, and 273 from hooping-cough, were registered; the numbers are below the average. Metria, erysipelas, and syphilis, were less than usually fatal. The deaths of the mothers in and after childbirth were 116; or one death of the mother to 1168 children born; much lower than it has been at the same season in London, or, perhaps, in any other city.

II. South-Eastern Division.—Measles and scarlatina prevailed in some of the parishes of Epsom; typhus and influenza in Guildford; at Farnham, Dorking, and the other districts of *Surrey*, the mortality was below the average. The Registrar of Frimley only registered 6 deaths. "This is lower," he says, "than I ever remember it to have been. Owing to the alarm of the cholera, the people in this district have been more guarded in their manner of living, in consequence of the low price of almost every article of food and clothing."

The general mortality in *Kent*, *Sussex*, and *Hampshire* is lower than it was in 1848; yet small-pox, scarlatina, and measles pravailed in many districts. In Abingdon, Bradfield, Reading, Easthampstead, and Windsor, (*Berkshire*,) the mortality was in excess. Scarlatina and small-pox prevailed in Reading; measles, hooping-cough, and small-pox in Windsor, where 23 deaths from cholera were registered; the last on October 31st.

III. South Midland Division.—The mortality was lower than in 1848 in *Middlesex* and *Buckinghamshire*, slightly higher in *Oxfordshire*, *Northamptonshire*, *Huntingdonshire*, *Bedfordshire*, and *Cambridgeshire*. There was an excess in Hitchin from cholera and typhus; in Great Marlow, High Wycombe, from cholera, measles, and typhus. Cholera, diarrhœa, and small-pox raised the mortality in Northampton, prevailed in Titchmarsh, Thrapston, and Peterborough, and broke out in Bedford, and in about 11,000 inhabitants, 9 deaths were registered in the last 9 days of September, 26 deaths in October and November. The Board of Guardians was liberal; Medical relief was afforded in 820 diarrhœa cases. The effects of crowding are shown in North Witchford; in the sub-district of Chatteris the deaths in the quarters, December 1845-9, were 33, 39, 41, 42, 73; in the last quarter the tenements were crowded by labourers on the river works.

IV. Eastern Division.—The deaths in the five corresponding quarters of 1845-9 were 4525, 6118, 4674, 5033, 5753, in *Essex*, *Suffolk*, and *Norfolk*. The excess was greatest in West Ham, Romford, Witham, Woodbridge, Yarmouth, and Norwich. Cholera was noticed in West Ham, Chipping Ongar, Rochford union-house, Lowestoft, and Norwich. Scarlatina and low fever prevailed in several districts.

V. South-Western Division.—The mortality in 1849 was generally lower in *Wilts*, and higher in *Dorsetshire*, *Devonshire*, *Cornwall*, and *Somersetshire*, than it was in the corresponding quarter of 1848. Small-pox prevailed in many districts where vaccination had been neglected. Scarlatina prevailed in Heavitree, where is "great destitution among the labouring population from want of labour." There were 2 deaths from cholera in St. Sidwell, 13 in St. David, Exeter (the last on Oct. 30th;) and 18 from dysentery in the Exeter workhouse. The epidemic lingered in parts of Devon, Cornwall, and Somersetshire, and broke out fatally in Taunton workhouse and in Bridgewater. The deaths in Bridgewater, from all causes, were 318; which is nearly at the rate of 4 per cent. per annum of the population. Cholera prevailed in Plymouth through October; fever in Bath.

VI. West Midland Division.—The mortality was lower than the average in *Gloucestershire*, *Herefordshire*, *Shropshire*, and *Warwickshire*; higher than the average in *Staffordshire* and *Worcestershire*. Scarlatina was rife in parts of Shropshire and Warwickshire. Several cases of cholera were fatal over Staffordshire. The deaths in Birmingham were 1036; in Coventry, 349; in Worcester, 143; Stafford, 115; Shrewsbury, 122.

VII. North Midland Division.—The mortality in *Leicestershire* and *Rutlandshire*, was above; of *Lincolnshire* and *Nottinghamshire* below the average of the season. The mortality was below the average in Lincoln and Nottingham. The mortality was above the average in the Basford district, where were several cases of cholera, as well as in Newark.

VIII. North-Western Division.—The mortality in *Cheshire* and *Lancashire* is considerably below the average. Scattered cases of cholera occurred over the counties—chiefly in October. The deaths in Liverpool and West Derby were 2681; in Manchester and Salford 2415. The Registrar of Howard-street, Liverpool, says, that the sub-district is depopulated *one-half* from various causes. No deaths from cholera occurred in the Manchester workhouse, containing 1300 inmates.

IX. York Division.—The mortality was above the average in the West Riding; below the average in the East and North Ridings. Cholera broke out tn Knaresborough with some severity, and doubled the deaths in the sub-district. The epidemic cholera was fatal in Leeds in October. Bradford and other districts suffered more or less from the disease. Sheffield was comparatively healthy. Hull suffered heavily from cholera in the summer, and lost some inhabitants in October; but the last two months of the year were healthy. In Rillington only 4 out of 4000 inhabitants died from any cause in the three months.

X. Northern Division.—The mortality of *Durham* and *Northumberland* was above, of *Cumberland* about, of *Westmoreland* below, the average. The cholera epidemic terminated in many of the districts of Durham at the beginning of the quarter: the epidemic broke out at Bedlington in November, and killed on the hill-side 26 people in a short time. There is a want of drainage. Cholera also raged in Alnwick.

XI. Welsh Division.—The mortality was somewhat above the average in Wales; chiefly from cholera and scarlatina. In Merthyr-Tydfil, the scene of the great tragedy in summer, the deaths were 470.

HEALTH OF LONDON DURING THE WEEK ENDING FEBRUARY 23.

The mortality of the metropolitan districts, which in the last week of January amounted to 1094 deaths, has, during the three subsequent weeks steadily declined. The number registered in the week ending last Saturday, was 911; in the corresponding weeks of 10 previous years (1840-9), the deaths ranged from 961 to 1253, and the average was 1068, which, if corrected for increase of population, becomes 1,165; the result of the comparison is a decrease in the present return of 254 deaths. The improvement is most conspicuous in that class of diseases which affect the organs of respiration;

and in connexion with this fact, it is worthy of remark, that since the 24th of January, the mean temperature has been about 8° higher than in the same period of seven years. Last week the mean temperature was 47° 2′, though, in the corresponding weeks of 10 previous years (1840-9), it only ranged from 31° 7′ in 1845, to 45° 4′ in 1849. In the last four weeks, the deaths from consumption have been successively 137, 135, 113, and 94; from bronchitis, 126, 84, 88, and 79; from asthma, 33, 12, 22, and 21; from pneumonia, or inflammation of the lungs, 75, 69, 76, and 51. Last week, the deaths from the four diseases now mentioned were only 245, whilst the corrected average of the same week is 331. But, though the mortality from particular causes has so much declined, the deaths in the epidemic class show a small increase on those of the previous week. There were nine last week from small-pox, 11 from scarlatina, 21 from diarrhœa, 24 from measles, 32 from typhus, and 36 from hooping-cough; but these are all less fatal than usual, except measles and diarrhœa, of which the latter shows double the average, (as derived from the corresponding weeks of 1840-9,) though not more than in the same week of the last three years.

The deaths in the several hospitals of London occurred as follow :—

GENERAL.		Blacklands-house ...	0
St. George	3	Northumberland-house	0
Westminster	4	Whitmore House ...	1
Charing-cross	0	Pembroke House ...	2
Middlesex...	12	St. Luke	0
University College ...	0	Miles'	0
Royal Free Hospital ...	0	Warburton's	0
King's College	2	Lunatic Asylum, Bow ...	1
St. Bartholomew... ...	6	Bethlem	2
London	2	Lunatic Asylum, Brixton	0
Guy's	7	Retreat, Clapham ...	0
St. Thomas	4	New County, Wandswor.	2
FOR CONVICTS.		Peckham House ...	1
Hospital Ship, Unité ...	0	Camberwell House ...	0
Penitentiary Hospital,		LYING-IN.	
MILITARY AND NAVAL.		Queen Charlotte's ...	1
Royal Hospital, Chelsea (South)	0	British	1
Royal Hospital, Greenwich (East)	9	City of London	0
Royal Military Asylum	0	Millbank	0
Coldstream Guards Hos.	0	Hospital, York-road, Waterloo 2nd part ...	1
Grenadier Guards' Hospital	3	FOR PARTICULAR CLASSES.	
Scots Fusilier Guards ...	1	Female Servant Invalid Asy., Stoke Newington	0
Royal Ordnance	0	German Hospital... ...	0
Dreadnought Ship ...	3	French Hospital	1
LUNATIC.		Portuguese Jews' Hospital	0
Kensington House ...	0	German Jews' Hospital	0
Munster-house (Fulham)	0	FOR SPECIAL DISEASES.	
Normand-house(Fulham)	0	Small Pox...	1
Otto-house (Fulham) ...	0	Fever Hospital	1
Sussex & Brandenburgh-house (Fulham) ...	0	Lock	0
		Consumption, Brompton	0

TOTAL, 71.

MORTALITY TABLE.

Deaths in the Week ending Saturday, Feb. 23, 1850.

(Metropolis.)

CAUSES OF DEATH.	Total.	Average of Ten Weeks.
ALL CAUSES	911	1067
SPECIFIED CAUSES	908	1061
Zymotic (or Epidemic, Endemic, and Contagious) Diseases	169	191
SPORADIC DISEASES:		
Dropsy, Cancer and other Diseases of uncertain or variable seat	57	60
Tubercular Diseases	138	189
Diseases of the brain, Spinal Marrow, Nerves, and Senses	111	131
Diseases of the Heart and Blood-vessels	50	34
Diseases of the Lungs, and of the other Organs of Respiration	167	211
Diseases of the Stomach, Liver, and other Organs of Digestion	49	56
Diseases of the Kidneys, &c.	14	9
Childbirth, Diseases of the Uterus, &c.	8	11
Rheumatism, Diseases of the Bones, Joints &c.	6	8
Diseases of the Skin, Cellular Tissue, &c.	1	...
Malformations	3	2
Premature Birth and Debility	22	23
Atrophy	18	12
Age	45	75
Sudden	22	13
Violence, Privation, Cold, and Intemperance	28	29
Causes not Specified	3	6

The following is the number of Deaths occurring from some of the more important special causes:—

Apoplexy	22	Heart	41	Phthisis	94
Bronchitis ...	79	Hooping-cough	36	Pneumonia ...	51
Cholera.....	...	Hydrocephalus	25	Scarlatina	11
Childbirth	4	Influenza	2	Small-pox	9
Convulsions...	41	Liver	8	Stomach	7
Diarrhœa	21	Lungs	11	Teething	12
Dropsy	12	Measles	21	Typhus	32
Erysipelas ...	11	Paralysis	24	Uterus	3

BIRTHS AND DEATHS.

	Births.	Deaths.	Births over Deaths.
Males	781	467	314
Females	755	444	311
Total.....	1536	911	625

METEOROLOGY OF THE WEEK.

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Means
Electricity.*			Feb. 23, 8h. p.m., positive and tension moderate. This was the only time at which electricity was shown during the week.					
Rain in Inches.	0·00	0·00	0·00	0·19	0·00	0·00	0·00	sum 0·19
Amount of Horizontal Movement of the Air.	Miles. 200	175	165	152	238	70	25	sum 1015
General Direction of Wind.	N.W. W.S.W.	S.W.	S.W.	S.W. & N.W.	W.S.W.	N.W. &W.	S.W.	S.W.
	A.M. S.W.	W.S.W.	S.W.	S.W.	W.S.W.	W.S.W.	Calm.	
Difference between the Mean Temperature of the day and the same day on an average of 7 years.	+ 7·6	+ 9·0	+ 8·0	+ 8·2	+ 6·3	+ 9·1	+ 5·5	+ 7·7
Ditto. Dew Point.	40·4	43·7	44·2	45·6	40·0	40·9	33·6	14·9
Mean of Thermometer. Dry.	46·6	48·3	47·5	47·8	45·9	49·8	45·3	47·2
Mean of Barometer.	30·139	30·061	29·962	29·950	30·035	30·178	30·155	30·070

* In this Column, A. stands for Active; N. for Negative; and P. for Positive.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College, at the meeting of the Court of Examiners, on the 22nd instant:—Messrs. Robert Nasmyth, Brook-street, Grosvenor-square; Thomas Henry Waterworth, New Kent-road; William Dewsnap, Hammersmith; John Burchall Peren, South Petherton, Somerset; Charles Christopher Hayman, Axminster, Devon; William Filliter, Wareham, Dorset; Richard Ford Foote, Islington; George Stacpole Gabb, Royal Navy; Richard Evans, Royal Navy; and Mark Kebbell, Brighton. At the same meeting of the Court, Messrs. Charles Douglas Shephard and Charles Ede passed their examinations for naval surgeons; these gentlemen had previously been admitted members of the College, their diplomas being dated respectively March 15 and October 25, 1844.

THE FELLOWSHIP.—With reference to the recent regulation of the College of Surgeons, respecting candidates for this honour, it has been stated, that members of the College must be of *twenty-seven* years' standing. On making inquiries at the College, we find that the term is for twenty years, or thirteen years a member prior to the Charter last granted to the College.

THE COLLEGE LECTURES.—We understand that the Lectures annually delivered in the Theatre of the Royal College of Surgeons will commence on the 12th of March, on which occasion Professor Owen will deliver twenty-four Letures, on the "Generation and Development of the Vertebrate Animals;" to be followed by Professor Paget, who will deliver six Lectures on "Inflammation," commencing May 7. Additional particulars may be obtained on reference to our advertising columns.

APPOINTMENT.—Dr. Benjamin Jemmett has just been unanimously elected Physician to the Westminster General Dispensary, in the vacancy occasioned by the resignation of Dr. Wegg.

THE EGYPTIAN CAMPAIGN.—The following Medical officers are, it is stated, the only survivors of the campaign under General Abercromby:—Sir James M'Gregor and Sir John Webb. Directors-General of the Army Medical Department—Dr. Hume, Inspector-General; Dr. Hodson, Sir Charles Forbes, Howell, and A. White, Deputy-Inspectors-General.

NAVAL SURGEONS.—At the last meeting of the Court of Examiners of the Royal College of Surgeons, Messrs. Charles Douglas Shephard and Charles Ede, passed their examinations for Naval Surgeons. These gentlemen had previously been admitted members of the College, their diplomas beardate respectively March 15, and October 25, 1844.

UNIVERSITY COLLEGE HOSPITAL.—On Saturday last, Dr. Hare, Senior Physician to the St. Mary-le-Bone General Dispensary, was appointed by the Council of University College, Assistant-Physician to University College Hospital.

OBITUARY.—On the 20th instant, at Brighton, in his 77th year, Robert Dix, Esq., surgeon.

NAVAL APPOINTMENTS.—Surgeon Superintendent Charles H. Fuller, who has a pension for wounds, to the Blenheim, 56, steam guard-ship at Portsmouth; Assistant Surgeons Joseph Henderson (1840) and Gerald Yeo (1842) promoted to Surgeoncies; Assistant Surgeon M. C. Steele (1845) to the Arethusa, 50, at Davenport.

SURGEONS IN THE AUSTRIAN ARMY.—The want of surgeons in the Austrian army is so great that, in order to induce civilians to accept military rank, it has been determined to forego the amount of the diploma-fee, and to give a bonus of from 100 to 150 florins.

SEAMEN'S HOSPITAL SOCIETY.—The annual general meeting of the Governors of this excellent Institution was held last week, when the 29th Annual Report was read, which began by stating, that during the late awful visitation of the cholera, the number of cases admitted had been upwards of 250. During the past year, the number of general patients admitted on board the Dreadnought amounted to 2239, and with those remaining on board from the preceding year, viz., 181, making a total of 2420, of which large number, 1,475 were discharged cured; convalescent 230; returned 54; died 241, remaining under treatment 179. The out-patients admitted during the same period amounted to 2099, making the total number of seamen received since the foundation of the Charity 93,310. Not less than 414 cases of casualities and accidents which occurred on the river were attended to during the past year. The Secretary stated, that the income the year amounted to 8264*l.*, from which sum the Committee were enabled to purchase 2300*l.* in the stocks.

SIR JOHN FRANKLIN.—Humboldt is said to have incidentally given his opinion, that "It was probable Franklin had not perished, but was still shut in by the ice; and he gave several facts of voyagers, whom he had seen, and who had been for long seasons so detained in the Northern Seas. The Esquimaux of the coast, he said, were not at all dangerous. Franklin was well supplied with provisions, and would probably yet return to give an account of his voyage. Indeed, the report, that the Esquimaux Indians had said that some vessels had long been fast in the ice, away off to the north, seemed to be fully confirmed."

NEW HOSPITAL FOR DISEASES OF THE CHEST.—It is said that the Commissioners of Woods and Forests have granted a piece of ground near the Victoria-park for a new hospital for diseases of the chest. Although the hospital at Brompton has led to the publication of an excellent report, we are not in favour of special institutions for that purpose, as the collection of phthisical cases in special hospitals must render the air so impure as to increase the liability to the disease. The greater number of physicians who have devoted themselves to the treatment of consumption, have perished from disease of the lungs.

ST. LUKE'S HOSPITAL.—It appears, from the report of the Committee for the past year, that, in addition to 101 incurable lunatics, permanently maintained in this hospital, 285 patients, deemed curable, were under treatment; of whom, in 167 cases the treatment was completed, and 118 remained in the Institu-

tion. Of the 167 cases 101 were discharged cured, equal to 60½ per cent.; 52 were discharged uncured, and 14 died. 4 died of typhoid fever and cholera. The receipts during the year amounted to 8,903*l.* 18s. 8d., including a balance of 1,882*l.* 0s. 4d. from the former year. The expenditure was 6,822*l.* 8s. 4d., the hospital expenses being 3,795*l.* 8s. 6d.; the balance in favour of the Institution 2,081*l.* 10s. 4d. A legacy of 100*l.* was received during the year. The centenary festival will be held next year, the hospital having been first opened for patients on the 31st of July, 1751.

THE METROPOLITAN POLICE.—According to the Parliamentary Report just published, the medical expenses incurred on behalf of the Metropolitan Police amounted, during the past year, to 2376*l.* 6s. 7d. The salary of the superintending-surgeon, Mr. Fisher, is 600*l.*, and there are sixty-two distinct surgeons, at salaries varying from 4*l.* to 72*l.* per annum, making a total of 1860*l.* 7s. 6d. Medical attendance, medicines, &c., for destitute prisoners, and for poor persons in cases of accidents, &c., in the public thoroughfares, cost 519*l.* 15s. 1d.

A PUBLIC CEMETERY FOR BRIGHTON is in contemplation.

THE NEW BRIGHTON DISPENSARY.—This Dispensary will be opened next month. The arrangements of the new building seem to be very good. The Dispensary was established in 1809.

A SURGEON at New Shoreham has been fined 1*l.* and costs for beating his errand-boy. The magistrates said, that, although the law allowed a schoolmaster to punish a boy, it did not sanction a master beating his servants.

SUICIDE FROM DREAD OF HYDROPHOBIA.—Mr. Grant, a surgeon in the Honourable East India Company's service states, that he knew a man of the name of Grant, who, in infancy, had been made an orphan by the decease of the parents from hydrophobia. He was the son of a peasant. His father, with a number of other men, was engaged on a fine summer day in the labours of the husbandman. While thus occupied, a mad dog came among them, and bit several of them in the face and hand. The cottage of Grant was near the field; and the dog (after ineffectual attempts to overpower him) made directly for it. His wife was sitting near the door, with her infant boy at her breast. She saw the dog rushing towards her, open-mouthed. Suddenly starting up, she threw her infant into a basket or creel, which was suspended on the wall. The dog bit her severely, but missed the infant. There being no medical or surgical aid available, all those whom the dog bit perished. It is worthy of record, however, that some of them anticipated a dreadful death by a kind of excusable suicide. Having a most tremendous impression of the horrors of dying in a paroxysm of hydrophobia, Grant and his wife had their veins opened, that they might bleed to death, which they did with the most calm resolution.—*Calcutta Medical Transactions.*

BATHS AND WASHHOUSES.—The Town Council of Preston have voted a sum of 8000*l.* for the erection of baths and washhouses in that borough. They are to contain 100 baths and 100 washing compartments, and are to be erected after the plan of the model establishment in Goulston-square, Whitechapel.

HEALTH OF TOWNS BILL.—The inhabitants of Totness have petitioned against the application of the powers of this act to their town, stating that the Town Council has sufficient powers already to do all that is requisite, and that, with their abundant supply of water, the town could be rendered perfectly clean, adding considerably to its present proverbial reputation for health and cleanliness, *at a much less cost* than the act would cause:—*hinc illæ lacrymæ*,—the cost is the cause of the opposition, and these *fashionless bodies*, as the Scotch would call them, are unwilling to adopt a notoriously beneficial measure on account of the cost. They may have a sufficient supply of water, but they do not use it properly, or it would not be necessary to say they could themselves adopt measures which would add considerably to its present proverbial reputation for health and cleanliness. Proverbs are soon made, if Totness be so proverbially healthy and clean, and yet considerable additions can be made both as regards health and cleanliness. We fear it is merely a comparative state, after all.

CITY COURT OF SEWERS.—This Court has decided, by a majority of 27 to 20, against any increase to the salary of the Medical Officer of Health for the City. Mr. Simon, therefore, will receive 500*l.* a-year still, instead of 800*l.* as was proposed. Sir P. Laurie threatened to call a meeting of the rate-payers in his ward, if the proposal were carried.

SUPPOSED DEATH FROM POISON.—At Gateshead, an inquest was lately held on the body of a female, aged 18, who was said to have died under peculiar circumstances. She had been a patient at the Dispensary for dropsy, when it was discovered that she was pregnant, and she was accordingly dismissed. She afterwards came under the hands of a quack named Golightly, who gave some medicines, which her mother stated at the inquest were betony, agrimony, and raspberry leaves, and rhubarb, with white ginger. She also had cayenne-pepper, according to the same evidence. The mother added, that she herself had taken some of the medicine supplied by Golightly, and that it had not hurt her. Golightly, it seems, was a marine-store dealer. The mother stated, that the herbs were given to her, and she was to boil them. The sister of the deceased, however, said, that she went for the medicine, and was supplied by Golightly with it in bottles, of which she had two. She also contradicted her mother's statement, that any one, besides the deceased, had taken any of Golightly's medicine. It was taken three times a-day. Mr. Robinson, of the Dispensary, said, that he was called to the deceased, and found her in a fit. He had previously told the mother she was pregnant, and he then charged her with having given her daughter some medicine, which she denied. When he saw her, the pulse was imperceptible; it afterwards became intermittent. The breathing was stertorous. Death soon took place. The conclusion to which he came was, that the deceased had died from taking some narcotico-acrid poison, and not from natural causes. He founded this conclusion on the symptoms during life, and the appearances after death. The contents of the stomach and intestines were now in his possession, sealed up. He was not certain that the presence of the poison, if any had been administered, would be detected. It would require a very careful analysis to detect its presence. Vegetable poisons were not readily detected. Persons might die from them, and yet no trace be discoverable in the body. Dr. Charlson expressed his entire concurrence in the evidence given by Mr. Robinson. The inquest was adjourned, in order that Dr. Glover might institute a chemical analysis of the contents of the stomach. Dr. Glover, failed, however, to detect any poison. He gave it as his opinion, however, from the symptoms during life, and the appearances after death, that her decease was caused by the exhibition of lobelia inflata. The facts clearly pointed to a narcotico-acrid poison, and particularly to lobelia. The jury returned a verdict, that deceased died from causes the evidence failed to reveal. Golightly himself attended the inquest, and made a statement, in the course of which it was elicited, that five or six young women had called on him for the same complaint as the deceased, to wit, the cessation of the menstrua. As his charges are very low, 1s. a bottle, this dealer in marine stores may drive a thriving business. The coroner strictly cautioned him as to his future proceedings. He (Golightly) acknowledged that he did not know the herbs he used when in the dry state. He appears to be connected with the Coffin quackery.

IMPORTANT TO THE MEDICAL PROFESSION.—In a case of action for assault, (Dillon *v.* Reidy,) tried before the Assistant-Barrister, W. E. Major, Esq., at the Kilrush Quarter Session for January, Dr. Foley, of Kilrush, was summoned by the plaintiff, to testify to injury received. On being called upon to be sworn, he applied to the barrister for an order for remuneration for loss of time, and stated that he had been frequently examined in the Superior Courts, as well civil as criminal; that in every instance the Judges awarded compensation for loss of time, and hoped his Worship would extend the same protection to him. The Barrister replied, that the claim was a fair one; that his time was as much lost to him there as at the assize or at any other court, and he would award to him the same remuneration as the Judges were in the habit of doing." He called on the plaintiff's Attorney, Mr. Mat. Kenny, to pay the witness. Mr. Kenny asked the witness, what payment he required? The reply was, "At least a guinea." The fee was refused. Dr. Foley told the Court, that his object was to assert a principle. It was now established; thanks to his Worship for the willingness and readiness he evinced to protect Professional rights, and left the Court without being sworn.

THE CHOLERA AND THE DISTRICTS OF THE METROPOLIS.—By a Diagram accompanying the Registrar's weekly Return, it appears, that the inhabitants of the north side of the Thames are at an average elevation of 51 feet above high water mark; and, as respects density, in the proportion of 52 to an acre, 8 to a house; the houses averaging in annual value, 46*l.* Their water is supplied chiefly from the Thames above Battersea; from the New River, and the Lea. The inhabitants of the south side of the Thames are, on an average, only 5 feet above Trinity high-water mark; and, as regards density, in the proportion of 14 to an acre, 6 to a house; the houses averaging 25*l.* in annual value. The money expended on the relief of the poor by the inhabitants of the north side was 12d, in the pound; by those of the south side 18d. in the pound of house-rent. The water is chiefly from the Thames below Battersea, and from the Ravensbourne. The general mortality did not differ much on the north and south sides of the river; it was 251 annually in 10,000 inhabitants of the north, 257 in 10,000 inhabitants of the south side of the Thames. The density is less in the Surrey districts of London, which have only this great advantage over their northern neighbours. The mortality from cholera was very different; it was 44 on the north, and 127 on the south side of the Thames in 10,000 inhabitants. It is to be observed, that the value of houses decreases very regularly in the bands of districts proceeding eastward from Marylebone, Hanover-square, and St. Martin-in-the-Fields to Bethnal-green. Thus the average annual value of houses was, in Hanover-square, 153*l.*; in St. James, 128*l.*; St. Giles, 60*l.*; Holborn, 52*l.*; Clerkenwell, 33*l.*; St. Luke, 28*l.*; Shoreditch, 20*l.*; Bethnal-green, 9*l.*

INSURANCE OFFICES.—At the request of numerous correspondents, we insert a list of those Life Assurance Offices which remunerate medical men for giving a professional opinion on cases referred to them. In this list there are several standing very high, and all have a most respectable body of Directors. Having long advocated this point, we consider it the duty of a professional man to recommend those offices which recognize the principle that he is as much entitled to his fee as the lawyer:—Britannia, Princes-street, Bank, 1837.—Architects, Builders, &c., London. Established 1848.—British Mutual, New Bridge-street, Blackfriars, 1846; Church of England, Lothbury, 1840; Commercial and General, Cheapside, 1841; East of Scotland, Dundee; Engineers, Masonic and Mutual, Strand; English Widows' Fund, Fleet-street; English and Scottish Law Life, Waterloo-place, 1839; General and Mining, Bridge-street, Blackfriars, 1837; General Benefit, Farringdon-street; Great Britain, Waterloo-place, Pall-mall, 1844; India Life, Waterloo-place, Pall-mall; Industrial and General, Waterloo-place, Pall-mall; Leeds and Yorkshire, Dewsbury, 1824; Legal and Commercial, Cheapside, 1845; London Indisputable, Lombard-street, 1848; London Mutual Life, Moorgate-street, 1834; London and Provincial Joint-stock, Nicholas-lane, 1846; Medical, Legal, and General, Strand, 1845; Medical, Invalid, and General, Pall-mall, 1841; Metropolitan Counties, Regent-street, 1848; Mitre, Pall-mall, 1846; National Loan Fund, Cornhill, 1837; National Mercantile, Poultry, 1837; North of England, Cheapside, 1844; Professional, Cheapside, 1846; Prudential, Chatham-place; Royal Exchange, Royal Exchange, established 1720; Royal Farmers' and General, Strand, 1839; Royal Insurance, London; the Times, Ludgate-hill, 1849; the Scottish Equitable, Edinburgh, 1831; the Sea, Fire and Life Assurance, Cornhill, 1848; Sovereign, St. James's-street, 1845; Solicitors' and General, Chancery-lane, 1846; Star, Moorgate-street, 1843; Westminster and General, King-street, Covent-garden, 1836; Yorkshire, York, 1824.

TO CORRESPONDENTS.

"T.N.M."—An application to the Publisher will doubtless enable our Correspondent to complete his pages.

"Dr. F. B. Courtenay" has written to us regarding his claim to the priority of having used potassa fusa in impermeable stricture. As Sir Benjamin Brodie did not use the words attributed to him, there is no occasion to publish Dr. Courtenay's letter.

"T. H. H."—The medicine is detrimental, not in its use, but its abuse, in serious apoplexy.

"M.D."—We are obliged by the suggestions of so valued a friend.

"H. R."—We fear there is no radical cure for "the growing in at the sides of the toe-nails," but the very painful operation usually performed.

"H. M." asks the best book to get up English History for the Matriculation Examination at the London University. It is probable that Pinnock's Catechism would suffice.

"Wardrop on the Heart."—To a Constant Subscriber and other Correspondents we can only say, as before, "that he was bestowing all the time and attention he could give to the subject; and we hope, therefore, soon to present our readers with the remaining portion."

"Mr. Couch's" communication will receive early insertion.

"Jacob."—Next week.

"Verax" will have the kindness to favour us with his name.

We refer X.Y.Z. to a Notice over our Leading Articles.

The wishes of our Paris Correspondent will be attended to.

ORIGINAL LECTURES.

HUNTERIAN LECTURES

ON THE

GENERATION AND DEVELOPMENT OF THE INVERTEBRATED ANIMALS.

By RICHARD OWEN, F.R.S.,

Hunterian Professor and Curator of Museum of Royal College of Surgeons, Corresponding Member of the Institute of France, &c.

[Reported expressly for the "Medical Times," and revised by the Lecturer.]

LECTURE XVII.

THE METAMORPHOSES OF INSECTS.—Entomological definitions of the coarctate, obtected, incomplete, semi-complete, and complete modifications.—The larva, vermilarva, homomorphous and heteromorphous larvæ.—The pupa, mumiæ, chrysalis or aurelia, nymph—The imago—The true character of these defined stages and varieties—Metamorphosis a course of development alike in its essentials, with its stages varied as to time and place: all insects at first vermiform: larval types of Entozoa, Earth-worms, Nereids, Myriapods and Crabs—Metamorphosis and development of organs in Lepidoptera—Economy of social Hymenoptera, and of the parasitic Ichneumones and Strepsiptera—Reproduction of parts: Mr. Newport's experiments—Comparison of insect-metamorphoses with mammalian phases of embryonic development.

MR. PRESIDENT AND GENTLEMEN, — I cannot introduce my concluding observations on the generation and development of the class of insects in better language than in the words of our celebrated countrymen, Kirby and Spence, the entomologists to whom we owe the most useful and popular introduction to their delightful science. They say:—

"Were a naturalist to announce to the world the discovery of an animal which, for the first five years of its life, existed in the form of a serpent; which then, penetrating into the earth, and weaving a shroud of pure silk of the finest texture, contracted itself within this covering into a body without external mouth or limbs, and resembling, more than anything else, an Egyptian mummy; and which, lastly, after remaining in this state without food and without motion for three years longer, should, at the end of that period, burst its silken cerements, struggle through its earthly covering, and start into day a winged bird,—what think you would be the sensation excited by this strange piece of intelligence? After the first doubts of its truth were dispelled, what astonishment would succeed! Amongst the learned, what surmises! what investigations! Amongst the vulgar, what eager curiosity and amazement! All would be interested in the history of such an unheard-of phenomenon; even the most torpid would flock to the sight of such a prodigy."(a)

Now, a prodigy of this kind, in all its essential features, is manifested in this country under a thousand modifications. You will witness it, if you trace the life of the common beetle from the egg, or watch the same course of changes in the silk-worm.

The first form under which insects appear after quitting the ovum is called the *larva*, a name devised by Linnæus, to signify that beneath this worm-like or snake-like guise there was marked a higher form. The second stage is the *pupa* or *chrysalis*; and the third and last stage is the *imago*, as being the image to which all the former stages tended. Linnæus gave, also, precise terms to the different conditions of the pupa state of the insect; and these terms have been applied by some entomologists to characterise metamorphoses generally. When the last larval skin or sheath of the pupa shows no signs whatever of the limbs or appendages of the creature within it, Linnæus called it a "coarctate pupa." When the pupa-case shows, as if by a kind of sculpture in relief, the character of the organs beneath it, the pupa is "obtected." When the pupa-case forms a special sheath for all the projecting parts and appendages the pupa is "incomplete."

In all insects the development of the embryo proceeds, with a few secondary and unimportant modifications, in the order which was described and illustrated at the close of the preceding Lecture. The subsequent changes of the insect consist in the growth of all the parts, which takes place chiefly during the period of the moult, and in the gradual acquisition of the wings, which are developed, either when the insect has reverted to the passive state analogous to that of the ovum, as in the kinds of pupa above defined; or the development of the wings, as, *e.g.*, in the *Hemiptera* and *Orthoptera*, is not attended with any loss of activity or diminution of voracity.

The successive states of an apodal worm, of a worm with feet, and of one with feet and wings, being accompanied likewise with the acquisition and perfection of the antennal and visual organs of sense, and of the internal and external organs of generation, and often with great changes in the digestive, muscular, and nervous systems, in the development of one and the same insect, have been emphatically termed "metamorphoses." And entomologists, availing themselves of the neat definitions of the pupæ by Linnæus, have defined various kinds of metamorphoses under special heads, as the "coarctate," "obtected," "incomplete," "semi-complete," and "complete" metamorphoses.

The progress of the insect through these several stages being in many species interrupted, and active life enjoyed for a longer or shorter period under one or other of the immature forms, these have been sooner and more prominently brought under the notice of the naturalist, than if they had had to be sought for, as in the bird or mammal, in the early periods of the development of the minute embryo. They have consequently had assigned to them a character of singularity and exception which they do not intrinsically deserve. The different stages of development have been likewise, for the most part, studied only in the instances in which they are manifested by insects after exclusion from the egg, and thus their minor modifications and differences have attracted more attention than their essential resemblances and relations to one and the same type and course of development.

As soon as the young insect breaks through the egg-shell it is called, in Entomology, a *Larva*, whatever grade of development it may have attained *in ovo*. During the period when it acquires the wings, and until their complete acquisition, it is called a *Pupa*.

From the importance which has been assigned, in some estimable entomological treatises and classifications to the developmental changes of insects, and the special denominations that have been multiplied to express them, you might suppose the "complete," the "semi-complete," the "incomplete," the "obtected," and "coarctate" metamorphoses, to be different degrees, if not distinct kinds of transformations. But the insects which are said to be subject to the semi-complete and incomplete metamorphosis pass through the same kind and amount of change as those characterised by the obtected or coarctate pupa. The differences resolve themselves essentially into the place where, and the time in which, they assume and quit the vermiform state.

The Orthopterous and Hemipterous insects, characterised in entomology by a semi-complete metamorphosis, are, at one stage of their development apodal and acephalous larvæ, like the maggot of the fly; but instead of quitting the egg in this stage, they are quickly transformed into another, in which the head and rudimental thoracic feet are developed, to the degree which characterises the hexapod larvæ of the *Carabi* and *Petalocera*; the thorax is next defined and the parts of the head acquired, at which stage of development the young Orthopteran corresponds with the hexapod antenniferous larva of the *Meloe*; but it differs from both these kinds of Coleopterous larvæ in being inactive and continuing in the egg almost until all the proportions and characters of the mature insect are acquired, save the wings.

Oddly enough that development is called "a complete metamorphosis," which is permanently arrested at the stage in which the orthopterous insect enters life, and the only hexapod insects, as the apterous *Cimex* and *Pediculus*, in which the metamorphosis is never completed, are those in which it is said to be "complete." Burmeister, however, seems to be the only Entomologist who has pointed out the inaccuracy of the Fabrician definition; but he failed to free himself from the thraldom of words when he supposed that, in the development of any insect there was, "properly speaking, no change of form, but merely a repeated casting off of the exterior skin."

With regard to the terms incomplete, obtected, and coarctate, they indicate, in fact, comparatively unimportant modifications of the last moulted skin of the larva of those insects which are torpid or quiescent at the period of the development of the wings. In the bee and beetle, and all *Hymenoptera* and *Coleoptera*, the legs, wings, and antennæ bud out and carry with them processes of the last larval integument, which thus forms in the pupa special sheaths for each growing organ of sense or locomotion in the perfect insect, and which organs are therefore comparatively free, although the pupa be quiescent. Lamark called such pupæ "Mumiæ."

In the obtected Lepidoptera the growing wings, antlia, antennæ, and thoracic legs are only partially covered by the pupal integument, being lodged in recesses on its inner surface, which make corresponding projections on its exterior, where their form and position may thus be recognised.

In the coarctate metamorphosis of the Diptera, the larva sheds its last skin before the growing legs and wings have impressed their forms upon it, and the exuvium constitutes an egg-shaped horny case, upon which there is not the least indication of the parts of the perfect insect.

Under whatever form the insect be excluded from the egg, if we trace its development further back, we shall find that the tendency of the mysterious multiplication, arrangement, and transformation of the hyaline nucleus and germ-cells is vermiform. In all insects the embryo first manifests itself as an apodal smooth Entozoon; next as an Annellide of thirteen rings: in all insects the first segment is quickly modified and the mouth established; and in this state the larva is excluded in some insects, as the bee and fly, without any appendages being developed; and in the bee before the completion of the intestinal canal.

The maggots of the order *Diptera* and *Hymenoptera* typify the Entozoa; they have no distinct scaly head, and no thoracic legs; hence they have been termed "vermilarves." Those of the *Diptera* and of the *Ichneumonidæ* represent the parasitic worms, not only in structure, but in habits; the larvæ of the *Gastorophili* called "bots," pass that stage of their existence in the alimentary canal of higher animals. The larva of the *Anthorugia canicularis* may be, in like manner, considered as entozoa of the human subject. There is a breeze-fly (*Œstrus hominis*) which deposits its egg beneath the integument of the living body, and its larva there grows and flourishes like the Filaria in the cellular tissue. The larva of a species of *Cuterebra* occasionally finds its way into the human frontal sinus. Other vermilarves, as those of the *Œstri Bovis* and *Tarandi*, are developed beneath the integument or in the nasal sinuses of the Ruminants indicated by their specific names. I know not to what other modes of animal life than that of the parasitic Entozoa we can compare the habits of the voracious maggots of the flesh-fly, the essential condition of whose existence is the putrid flesh of higher organised beings. Here, however, the development of helminthoid larva has been beneficially ordained in order to neutralise the noxious effects of the otherwise inevitable processes by which dead animal matter reverts to its primitive elements. Insignificant, indeed, do these larvæ seem to be in the scale of nature, yet Linnæus used no exaggeration when he averred that three flesh-flies would devour the carcase of a horse as quickly as would a lion. The assimilative power is so great in the meat-maggot that it will increase its own weight two hundred times in twenty-four hours.

But the developmental energies are not exhausted by the rapid growth of the larva; some remain to be exercised in the formation of the new and peculiar organs which entirely change the form and properties of the creature. For this exercise they usually require the suspension of all the ordinary actions of life. The larval skin is thrust off by the new integument of the new organs, and is converted into an opaque brown case; the enclosed insect shrinks partly by the loss of exhaled fluids, partly by the condensation of its former soft tissues into the new and firm substances constituting the legs and wings. A large

(a) "Introduction to Entomology," Vol. I., letter iii, p. 59.

and distinct head is now developed, with eyes, antennæ, and instrumenta cibaria; all which processes are carried on in the quiescent concealment of the opaque and dark exuvium, like the analogous processes in the egg of the oviparous, and within the womb of the pupiparous, insect. The active carnivorous vermilave returns, in fact, a second time to the state of an ovum, when it becomes the coarctate pupe; and the perfect insect, splitting its cerement, issues forth as by a second birth.

The larvæ of the gnats (*Culex*) and crane-flies (*Tipulæ*) have a distinct corneous head with jaws; the former have a plumose anal coronet, by which they sustain themselves at the surface of the water; the orifices of the tracheæ are placed in the middle of this coronet. A pair of tracheal tubes extend through the long, slender, and extensile anal canal of the aquatic grub of the *Musca* (*Eristalis*) *tenax*. By this mechanism, which is analogous to the tube of the diving-bell, the rat-tailed larva can derive its requisite supply of air from the surface while groping for food in the mud at the bottom of the pool.

The economy of the Hymenoptera and the various circumstances attending the development of their apodal larvæ form the subjects of a long chapter in the History of Insects.

I must be governed in the unavoidably brief selection from this rich storehouse of interesting facts by the specimens which Hunter has left for our instruction. Here (exhibiting the preparation No. 3104) we have a portion of the nest of a social hymenopterous insect of the wasp tribe (*Polistes major*), showing the larvæ and their cells in every stage of growth; the smallest larvæ and the shallowest cells are at the lower margins of the pendent nest; and observe how, in these beginnings of cells, the part of the incomplete circumference forms two, three, or more sides of a complete hexagon, demonstrating that this is the form of cell originally and expressly made by the insect, and not the accidental and inevitable result of the reciprocal pressure of originally cylindrical cells, moulded upon the bodies of their simultaneously-working fabricators. The parent wasp of this colony began her labours in spring. A solitary mother and independent builder of the required shelter for her offspring, she herself nursed and fed her first brood, which, being non-breeding labourers, soon aided their parent in building the cells and rearing her larvæ. You will observe that the full-grown grubs, which require no more food, and are about to fall into the pupa state, are shut in by a transparent convex pellicle, which covers the mouth of the cell.

In the common wasp, the larva is hatched eight days after oviposition; it grows to its full size in twelve to fourteen days, then spins its delicate hood, casts its integument, which has grown with its growth from the time of quitting the egg, and, after a passive pupa state of ten days, emerges a perfect insect. The males and perfect females are reared at the beginning of autumn; the abundance of food yielded by the ripe fruit at that season may influence the higher development of the larvæ, which are fed by the regurgitated contents of the crop of the nursers.

The fertile females share with the non-breeders or neuters of the rapidly increasing community, the labour of rearing the young broods; the males, or drones, perform no kind of work. At the close of autumn, when provender is scanty, and hardly to be got, the neuters, by a strange, and, as it would seem, perverted instinct, save the later brood of grubs from the pangs of famine by killing and casting them out of the nest. The young females are impregnated previous to the setting in of winter; the males soon after die; the females then disperse, seeking winter quarters in sheltered situations; and those which survive the rigours of the frosty season commence, at the return of spring, the foundation of a new colony.

The higher instincts of the honey-bee (*Apis mellifica*) teach it to lay up a winter store of food, upon which, the males having been destroyed on the performance of their sole office, the queens, with a family of neuters, subsist till spring. The neuters alone now recommence their labours of housing, in waxen cells, the eggs of the fertile female, and feeding the larvæ. New colonies so raised successively emigrate from the parent hive, or "swarm"; they consist of a queen or fertile female, and perhaps a thousand attendant neuters. Thus the association, which is annually dissolved and re-commenced by the wasps, is permanent in the honey-bee, and the fertile female, or queen, never shares with the neuters the labours of the hive.

The development of the bee is more speedy than that of the wasp; the larva is hatched in three days after the exclusion of the egg; it feeds and grows five or six days; is then shut up by the workers, spins itself a cocoon in thirty-six hours, remaining a passive pupa eight or nine days; then breaks through the lid and emerges in its perfect state. Thus the whole period of development from the exclusion of the ovum is from eighteen to twenty days; this, however, relates to the neuter. The male or drone larva spends only twenty-four hours in spinning its cocoon, and emerges on the sixteenth day after its deposition as an egg. A young queen is perfected on the twenty-fourth day. It is remarkable, that the larva of the bee and of the parasitic Hymenoptera have no anal outlet; no fæces are passed until the larva has acquired full growth, and has ceased to feed, preparatory to the pupa-state: thus the fluids of insects infested by the parasitic larvæ are not contaminated by the excrements of their parasites; and the bee-cells are kept sweet and clean during the active life of the larva.

In these preparations (Nos. 3117 to 3123 inclusive) are shown the irregular subelliptical cells with the larvæ and perfect insects of the humble bees (*Bombi terrestris* and *lapidarius*.) The societies of this genus, which consist of about sixty, and occasionally of 200 individuals, continue, as in the wasp-tribe, only until the beginning of winter, and the few impregnated females which survive the frosts, found fresh colonies at the commencement of the following spring. The fertile female shares in the labours of the community which she has originated, and she is provided, like the neuters, with the dense fringe of hair surrounding the pollen plate of the hind legs, which the queen of the hive-bee does not possess. The first progeny of the humble-bee are neuters; the males are not developed until autumn, and they are the produce of a smaller kind of fertile female. The whole economy of the humble-bee was very completely observed by Hunter, whose MS. notes on this subject have been published in the fifth volume of the Physiological Catalogue.

The larvæ of the Coleoptera are active, although some, as the nut-weevil, are apodal, like the larvæ of the bee. In most of the herbivorous species the thoracic legs are represented by fleshy tubercles; but the larvæ of the carnivorous beetles have the thoracic legs more completely developed before quitting the ovum. The head is horny, and the trophi are well developed in all: the jaws frequently resemble those of the perfect insect, as in the *Carabidæ*, the larvæ of which likewise have antennæ.

The circumstance of most physiological interest in the development of the Coleopterous order of insects is the great length of time during which the species actively exist in the vermiform or larval stage of their development. The larvæ of the cockchafer typify the earth-worm in their habits, and continue for three years burrowing in the soil and devouring the roots of grass and other vegetables. The larva of the stag-beetle bores its way into the trunk of a tree, generally a willow or oak, and remains there six years. It is furnished with two powerful jaws, with which it gnaws the wood. It forms a cocoon of the minute chips or tan, to which it reduces the wood, and passes a considerable period in the pupa state; during which, the large horns of the male are folded upon the breast and abdomen, protecting the antennæ and legs.

The anatomy of an insect in its different stages of development, and the changes of both the external and internal parts in the progress from the larva to the imago state, have been most accurately and closely examined in Lepidopterous insects. Many of these changes are shown by Hunter, in his extensive series of preparations of the silkworm moth. They were investigated by Lyonnet in the *Cossus ligniperda*. They have been described and illustrated with much accuracy and detail by Herold in the *Papilio Brassicæ*, and by our own indefatigable entomologist, Mr. Newport, in the *Sphinx Ligustri*, and other insects. The larvæ of the Lepidoptera quit the egg with a scaly head and jaws, with three pairs of thoracic legs, short, and with claws, and usually four pairs of tubercular prolegs, supported by the sixth, seventh, eighth, and ninth segments; sometimes there is also a fifth pair upon the anal segment. The prolegs, which entirely disappear in the pupa, are, however, less constant than the thoracic legs. The larvæ of the Lepidoptera are commonly herbivorous, and devour considerable quantities of vegetable matter. The coarsely masticated leaves are conveyed, by a short and wide œsophagus, to a much longer and wider chylific stomach. Six pairs of capillary bile-tubes indicate, by their insertion, the commencement of the intestine, which terminates by a wide, short, and longitudinally plicated rectum, upon the last segment.

In its perfect state, the butterfly, or sphinx, subsists only on the fluids of vegetables: its maxillary apparatus is converted, by the abrogation of the horny mandibles and the extreme prolongation of the maxillæ, into a long suctorial tube, called "antlia." A long and slender œsophagus conveys the fluids to the chylific stomach, and to a wide crop, which during the pupa state has been gradually expanded from one side of the end of the gullet. The chylific stomach has shrunk into a comparatively short fusiform cavity, which is still characterised by the transverse sacculi and constrictions. The small intestine has diminished in width, but increased in length, and now lies in several convolutions between the chylific stomach and colon, the upper part of which has also been produced into a cæcum. The biliary vessels are diminished in length, but still communicate, by a short common duct on each side, with the commencement of the small intestine.

In the bee the metamorphosis of the digestive organs is still more striking than in the butterfly, inasmuch as the alimentary cavity consists, beyond the short and wide œsophagus, exclusively of a large transversely plicated chylific stomach without intestine or vent.

The larvæ of bees and wasps have from four to six biliary vessels, which shrink in diameter and contract in length during the pupa state.

The gizzard is never present in the vermiform larvæ of the *Coleoptera*, although usually possessed by the perfect insect.

In the larvæ of the *Scarabæi*, *Melolontha*, and most herbivorous Coleoptera, the chylific stomach is shorter than in the imago; but it is furnished at both ends with cæcal appendages, which disappear during the metamorphosis, except in the genus *Hister*, in which some traces remain in the perfect insect.

The salivary vessels of the caterpillars of the Lepidoptera are of two kinds; one pair is short and broad, sometimes vesicular, as in the *Cossus ligniperda*, and their ducts terminate at the base of the maxillæ. Those of the second pair are very long and slender, occupying, with their longitudinal coils, the sides of the abdomen, and sending their slender ducts forward to unite together and terminate upon a peculiar prominence upon the under lip, which is called the spinneret. (This was shown in the preparations, Nos. 2985 to 2988.) These tubular glands, though classed with the salivary apparatus, are peculiar, in their full development, to the larvæ, and are called "sericteria" or silk-tubes, because they prepare the glutinous material or silk, which the larva spins to form its cocoon. In the perfect insect, the remains of the salivary apparatus are limited to the thorax, and the common duct opens beneath the tongue.

The epithelial lining of the alimentary canal of the larva is shed at each moult; that of the closed stomach in the bee maggot is evacuated in the pupa state through the new formed anus.

The superabundant nutriment prepared by the voracious larva is stored up in the condition of masses of fat which surround the viscera and occupy their interspaces.

The parasitic Ichneumons introduce their ova beneath the skin of the larvæ of Lepidoptera. When hatched the Ichneumon larvæ subsist upon the fat of the caterpillars, which they infest. They avoid penetrating the alimentary canal, but evidently destroy many of the minute branches of the trachea which ramify in the adipose tissue. Such wounded tracheæ probably permit the escape of

sufficient air for the respiration of the parasitic larvæ; for though the caterpillars so infested survive and go into the pupa state, they are uneasy, and evidently diseased; the loss of the adipose store of nutriment prevents the completion of the metamorphosis, and instead of a butterfly, a swarm of small Ichneumons emerges from the cocoon.

With respect to the outward form and integuments of the vermiform larva, these are contracted lengthwise, and partially dilated during the pupa state. The longitudinal muscles contract, and are permanently shortened by interstitial absorption: they shorten the body by sheathing the segments one within the other, the intus-suscepted portions being afterwards modified or removed.

The dorsal vessel, which is developed above the intestine, and begins to pulsate before the larva quits the egg, undergoes a corresponding change with the common integument in the pupa state. It seems to be contracted by a series of intus-susceptions; the abdominal part is slightly expanded, more definitely divided into chambers, and better provided with valves; the thoracic portion is simplified, shrunk in diameter, and is more distinctly defined as an aorta sent off from the heart.

The respiratory system undergoes still more remarkable modifications. The branchiæ of the aquatic larvæ either disappear or are developed into wings: the long pneumatic tubes of those which, living in water, breath air, shrink and disappear. The partial dilatations of certain tracheæ to form reservoirs of air for diminishing the specific gravity of the body, begin to be formed in the pupa state of the flying insect.

Herold has shown that germs of the generative organs exist in the larvæ of the Lepidoptera; the testes appear on each side as four nucleated cells in a longitudinal series, which, by progressive coalescence longitudinally, and by approximating transversely, and ultimately uniting at the middle line, first form an eight-chambered, and afterwards a spherical gland. The ovaria retaining their primitive separate state, increase in length, and assume the spiral disposition in the pupa state.

The progressive changes which the nervous system of the Lepidopterous insect undergoes in its metamorphoses from the larval into the perfect state, have been beautifully and accurately illustrated by Herold, in the cabbage butterfly, and by Mr. Newport, in a species of sphynx; but Lyonnet had anticipated both these observers, in recognising as well the principle as the details of these changes, which he briefly describes at the termination of his immortal monograph on the *Cossus ligniperda*.

The twelve ventral ganglions of the larva are subequal, and, except the two last, at regular distances; in the pupa, the interganglionic columns are shorter, but the body, becoming still more abbreviated and concentrated, throws those columns into curved lines. The eleventh and twelfth ganglions coalesce; the sixth and seventh disappear; the fifth blends with the fourth, and the third with the second; thus leaving four ganglions in the abdomen and two in the thorax. Corresponding changes take place in the cerebral portion of the nervous system. The maxillary ganglion decreases with the diminution and change in the maxillary apparatus. The œsophageal collar contracts, as does the canal which it surrounds. The brain enlarges, having to supply organs of sense, especially those of sight, which are perfected to correspond with the acquisition of new and improved locomotive forces. Analogous changes we may naturally conclude to take place in other orders of insects; and we find, indeed, in some of these, that the nervous system continues stationary at stages of development which are progressive and transitory in the Lepidoptera, and that further concentration is discovered to have taken place in the Melolontha, Cicada, Nepa, &c., than that which constitutes the highest stage observed by Herold and Mr. Newport in the Lepidoptera. The marvel is, that these changes, due in part, apparently, to mere mechanical influences, should be so regular, so orderly, so admirably adapted, in their final results, to the general condition and exigencies of the perfect insect. One might have supposed, that the particles of the soft and semi-fluid nervous matter, squeezed by the pressure of the surrounding structures, when the body seems to be, as it were, contracted by a universal spasm, would be irregularly dislocated or aggregated into one or more masses; but, on the contrary, we perceive the nervous particles moving forwards and re-arranging themselves in orderly groups, definite in their forms, in their proportions, and in their relative positions; these being apparently regulated by a law of prospective arrangement and arranged precisely in those situations where the greatest supply of nervous energy is required to radiate from them in the active and perfect insect.

The general principle of those changes is like that which governs the modifications of the muscular system, viz., a localisation of special masses at particular parts for special purposes, the result of which is the departure from a common to a particular type of arrangement.

One of the most obvious and remarkable phenomena in the larval life of an insect is the successive sheddings of the skin. The number and frequency of the ecdyses varies in different species, and relates to two circumstances, viz., the rapidity of the growth of the body, and the susceptibility or otherwise of the skin to be distended or to grow with the increase of the body.

The soft-skinned maggots of many flies, which acquire a vast increase of size during their brief larval state, never moult until they change into pupæ, when the exuvium forms the pupa-case. In like manner, the soft-skinned apodal larvæ of the Hymenoptera do not moult until they have acquired their full size. The caterpillars of the Lepidoptera moult at least three times, and some more frequently; the *Bombyx villica*, for example, from five to eight times, and the tiger-moth (*Arctia caja*) ten times.

With regard to the nature of the mutations and ecdyses which culminate in the perfect insect, I should hardly have felt justified, after what has been already detailed respecting the development of the larva in the egg, in referring to the hypothesis of Swammerdam,—that the imago was actually included in the larva, and that all new skins pre-existed beneath the old one,—if such opinion had not been adopted to explain the metamorphoses of insects in the admirable work, already cited, of Kirby and Spence, and maintained by Cuvier in the second and posthumous edition of his celebrated "Leçons d'Anatomié Comparee," where, in the sixth volume, p. 2, (1846,) he writes, "des l'instant ou les corps vivants existent, quelque petits qu'ils soient encore, ils ont toutes leurs parties: ce n'est point par l'addition de nouvelles couches qu'ils croissent, mais par le dévelopement de parties toutes pre-existantes à tout accroissement sensible." The accurate observations of Herold on the changes and development of the organs, during the pupa state, show these to be, like the original processes of the development of the larva itself, the results of a transmutation, increase, and coalescence of primitive elements of the different tissues,—elements which consist of nucleated cells or nuclei, like those that result from the spontaneous fissions of the primary impregnated germ-cell,—elements which may be viewed as parts of the original germ-mass, retained to be successively metamorposed into the successive larval skins, pupa-skin, and imago.

The few instances of the reproduction of mutilated parts in insects have been observed to take place only at the period of the moult, and are never manifested by the imago. A young *Blatta*, in which both the antennæ had been cut off, moulted a fortnight after the operation, and then acquired two new but shorter antennæ: the legs and prolegs of caterpillars are said to be produced in like manner after one or two moultings.

The passive and, as it were, embryonic condition to which most insects (Coleoptera, Lepidoptera, Hymenoptera, Diptera, many Neuroptera) return when, after an active larval life, the organising energies again superinduce the processes of development upon those of mere growth, is called the pupa state. The chief modifications of the pupa have already been explained in relation to the terms coarctate, obtected, incomplete, by which they are designated by Linnæus.

Some pupæ are protected only by the exuvial skin of the preceding stage, and have been termed "naked;" others repose in cases or "cocoons," artificially prepared by the larva. The valuable silken cocoons of the larva of the *Bombus mori*, called, *par excellence*, the "silkworm," are familiar examples of pupal chambers. In this cocoon (showing No. 3073) of a larger lepidopterous insect, (*Oiketicus Kirbyi*,) the larva, by one of those marvellous prescient instincts which give so much interest to entomological inquiries, covers the close and thick web of fine and soft silk which it has prepared for its pupal repose, with a stronger outer defence of portions of twigs irregularly bound together by silken filaments; thus suspended to a branch of the tree, it deceives and escapes the attacks of predatory insectivorous birds. The pupæ whose cocoon remains partially open, as in *Saturnia* and *Phryganea*, are usually called "guarded," (*pupæ custodiatæ*.)

All pupæ which are placed in dark situations are colourless, or of a yellowish white, and become darker when exposed to the light. The pupæ of most butterflies, which are suspended in open day, are of a green or yellowish brown colour; some are speckled with glittering spots of golden hue, either natural, or produced by the attacks of parasitic insects; and such pupæ have obtained the name of "chrysalis" and "aurelia."

The active pupæ of Orthoptera and Hemiptera are called "nympha." These insects, which are also said to have semi-complete pupæ, and to undergo an imperfect metamorphosis, are subjected, as I trust I have already proved, to the same law of repetition or analogy which is expressed so conspicuously in insects to which alone a perfect metamorphosis has usually been attributed; for, although moulting be no metamorphoses, even when accompanied, as it usually is in insects, with a certain change in the form of the body, yet the course of the development of those insects which, after exclusion from the egg, are subject only to ecdysis and growth of wings during an active nymph-hood, manifests, prior to exclusion, the same analogies, which Oken expresses in the following words:—"Every fly creeps as a worm out of the egg; then, by changing into the pupa, it becomes a crab; and lastly, a perfect fly."

It is not, indeed, true that every flying insect creeps, as a worm, out of the egg; all the *Orthoptera* and *Hemiptera* are excluded under the type of the crab, *i. e.*, with perfectly developed jointed legs, eyes, antennæ, and maxillary organs. The metamorphoses which the locust undergoes in its progress from the potential germ to the actual winged and procreative imago are nevertheless as numerous and extreme as those of the butterfly. The differences are relative, not essential; they relate to the place in, and the time during which the metamorphoses occur, and to the powers associated with particular transitory forms of the insect. The legs of the worm-like embryo-locust were once unarticulated buds, like the prolegs of the caterpillar; but the creature was passive, and development is not superseded for a moment by mere growth; these organizing processes go on simultaneously, or rather, change of form is more conspicuous than increase of bulk; the six rudimental feet are put to no use, but constitute mere stages in the rapid formation of the normal segments, which attain their mature proportions and their armature of claws and spines, before the egg is left. The first segment of the originally apodal and acephalous larva is as rapidly and uninterruptedly metamorphosed into the mandibulate and antennate head, with large compound eyes.

Thus developed, the young Orthopteran or Hemipteran issues forth into active life. Instead of further individual improvement or development, it may at once begin the great business of its existence by parthenogenetic propagation of its kind, as in the *Aphis*, and feed and die without further change of form; but, generally, the active, crab-like larvæ are subject to three moults. After the first the larva has merely increased in size; but the rudiments of the wings begin to bud forth beneath the second skin; and, after the second ecdysis, they present themselves externally as small leaves, which cover the sides of the first abdominal segment. When this active pupa or nymph again moults, the insect attains its perfect condition; the, at first, short, soft, and thick wings rapidly expand to their full size,

them dry in the air; the circulation of the blood along the nervures is arrested, and the metamorphosis of the individual is complete. Here, then, we see that the pupa stage, which, in the butterfly, was passive and embryonic, in the locust is active and voracious; whilst their respective conditions in the larval state are reversed. The whole period of the life of the Orthopterous insect, from exclusion to flight, may, if its organization during that period be contrasted with that of the Lepidopterous or Coleopterous insects, be called an active nymphhood.

Entomologists, overlooking that stage of the Orthopterous and Hemipterous insects, in which they are masked by the vermiform or true larval condition, have arbitrarily applied the term "larva" to the more advanced stage in which these insects, with certain Neuroptera, quit the egg. Mr. Westwood seeing, that at this stage they are nearly similar in form to the perfect insect, though wingless, has proposed to call them "homomorphous," or "monomorphous;" and those insects in which the larva is generally worm-like, &c., heteromorphous. It needs only an acquaintance with the embryonic changes of a cockroach or cricket to feel how inapplicable is the term monomorphous or uniform to such an insect or its development.

The chief business of an insect, for good or for evil, is performed in its larval state. The moth, which destroys your clothes, does it not in its complete, but its larval, stage. The cockchafer, which makes the young wheat-blade wither and fall, is a mere grub. Metropolitan duties shut out much of the field of nature; but still she may be found and studied everywhere. I first learned to appreciate the true nature and relations of the nominally various and distinct metamorphoses of insects, by watching and pondering over the development of a cockroach, which quits the egg as a crustacean. I saw that it passed through stages that answered to the seat which other insects were arrested: there was a period when its jointed legs were simple, short, unarticulated buds, —when its thirteen segments were distinct and equal,—when it was apodal,—when it was acephalous.

Now, the differences of the larvæ which are distinguished by the entomological terms, Heteromorphous, Homomorphous, Capitate, &c., essentially depend upon their quitting the egg to enter into active life at different periods of development, arrested at different grades. And it is most interesting to observe, that these several grades are analogous to, or are typified by, the complete forms of the different recognised classes of the great articulate sub-kingdom.

And these phenomena of the development are most important to zoological classifiers. They establish satisfactorily our ideas of the natural character of a true natural group, as also the natural progression of the affinities of its several grades.

When we see the entozoiform acephalous type first assumed by the first transformations of the germ-mass, we feel an assurance nothing else could give, that we are in accordance with Nature in commencing the ascending series of articulate animals, which are to culminate in the winged insect, from the entozoa.

When we find that the annulose worm, with a modified segment for a head, and tubular feet, is the next form assumed, according to the type of the annellides, we are thereby confirmed in our departure, in this instance, from the authority of the great Cuvier, who, through assigning undue value to a single character, the colour of the blood, placed the annellides at the head, instead of near the foot, of the articulate series.

When the next step is seen to be the acquisition of articulate limbs, and jointed antennæ, we conclude, that the articulated animals arrested at this grade of outward form, ought to be the next in position in the series, notwithstanding that, in the *Crustacea*, as the class is called, certain higher members manifest a high and concentrated character of heart, as the annellides showed a high character in the red colour of the blood.

Other larvæ, by the successive development of simple feet (prolegs) upon numerous segments, with aggregated acelli on the head, typify the myriapodous order, and then pass on to the simultaneous acquisition of jointed legs and wings, and thus indicate the close and essential affinity of the myriapods to the hexapod insects. Thus do insects in their metamorphoses diversely typify a Divine archetypal pattern.

In the Coleoptera and Lepidoptera the general articulate type is longer retained, and the particular one later acquired. In the Hemiptera and Orthoptera the morphological and histological changes more rapidly and uninterruptedly effect the ascent from the common to the special form. Professor Burmeister, in his richly-stored Manual of Entomology, translated by Mr. Schuckard, states that, "In insects with an imperfect metamorphosis there cannot consequently be a passage through the earlier forms and grades of the animal kingdom (Shuckard's Translation, p. 423.) The consequence here referred to appears to be, as far as I can understand the Author, a hypothetical necessity in Nature, for a difference among insects with respect to their metamorphosis; but no insect, however metamorphosed, passes through the forms and grades of the radiate sub-kingdom. Commencing as a Hydatid, it quits that sub-kingdom by the analogy of the Entozoa, and its subsequent grades are through the forms of the Articulata exclusively. No insect ever is, or resembles the ciliated Infusory, the Polype, or the Acalephe. The insects with a so-called imperfect metamorphosis, contrary to the statement of Burmeister, do pass through the earlier forms of the articulate sub-kingdom, but more rapidly and uninterruptedly than those in which the metamorphosis has been deemed more complete. In these the worm-like insect or larva is active, and the crab-like insect or pupa passive; in those the larva is passive, and the pupa active.

If the different stages in the development of man were not hidden in the dark recesses of the womb, but were manifested, as in insects, by premature birth and the enjoyment of active life, with a limitation of the developmental force to mere growth; if the progress of development was thus interrupted and completed at brief and remote periods, with great rapidity, and during a partial suspension of active life;—his metamorphoses would be scarcely less striking and extreme, as they are not less real than those of the butterfly.

As the insect must pass through the earlier forms of the Articulate, so must man through those of the Vertebrate, sub-kingdom. The human embryo is first apodal and vermiform: not, however, at any period an articulated worm. The metamorphoses of the germ-cells in the spherical (hydatid-like) ovum have laid down the foundation of the nervous system coeval with the first assumption of a definite animal form; and, by placing it along the back as a rudimental spinal chord, supported by a gelatinous noto-chord, have stamped the vermiform human embryo with the characters of the apodal fish. When the four undivided compressed extremities bud out, the form of the abdominal-finned fish, or of the Enaliosaur, is indicated. The development of the heart, of the vascular arches, of the generative organs with their cloacal communication with the rectum, typify the oviparous reptile. But these stages are rapidly passed, and the special character acquired.

Let us suppose that man, or any mammiferous animal, quitted the ovum and the parent in the guise of the fish, passed a certain period in water, retaining the branchial structure, the undivided extremities and the cloaca, and acquired only increase of bulk under that guise; let us suppose that then such larva, seeking some safe hiding place, returned to embryonic passivity and unconsciousness, and was rapidly transformed into the perfect state. Under this hypothetical modification of the course of human development, the changes of form would be plainly recognisable, and in the accessory circumstances, as well as the essentials, the mammalian metamorphoses would resemble those of the insect.

If, on the other hand, every insect had been developed like the *Diptera pupipara*, and the changes from egg to larva and from larva to pupa had been hidden in the oviduct of the mother, a long period might have elapsed before the recognition of these metamorphoses, and they could only at length have been discovered by a series of embryotomies, like those that have brought to light the corresponding metamorphoses of man and the mammalia generally.

By a premature exclusion and activity of the embryo, and by alternate periods of growth and development, one small group of vertebrate animals, the anourous Batrachia, do actually manifest the correspondence with the metamorphoses of insects, which I have illustrated by an instance of hypothetical possibility in man. Nay, do not the Marsupial mammalia offer an example of the premature exclusion? It needed only that the young kangaroo, with its equal and rudimental limbs, should possess, like the tadpole or caterpillar, the power of self-subsistence, and have gone on feeding and growing, whilst the further and final changes of form were reserved for, and concentrated in, a future brief period, to render the parallel almost complete. The creeping or swimming larva of the Mammal would then have gained its instruments for leaping, as the caterpillar acquires its organs of flight and the concomitant development and metamorphoses of the organs of sense, of digestion, and of generation, would have been closely analogous in both animals.

ORIGINAL CONTRIBUTIONS.

A SUCCINCT HISTORY OF ASIATIC CHOLERA, AS IT APPEARED IN NEWPORT PAGNELL IN AUGUST, 1833.

By EDWARD DANIELL, Esq., Surgeon, Newport Pagnell.

I beg to submit the following history of the cholera as it appeared in Newport Pagnell in the autumn of 1833, and I shall do so, commencing at the moment when there can be little doubt the disease really did enter, and describe the manner in which I believe the poison was conveyed.

I had some business with the perpetual overseer of this place, and was conversing with him at his own door, when a man came up to us with a prison pass. He had been confined for vagrancy in the Coldbath-fields Prison, and this pass was an authority entitling him to lodging and food for the night. As in most towns, so in this, there are in the suburbs places of resort for travellers of every description, bearing upon their sign-boards the inviting appellation of "Travellers' Rests," "Travellers' Homes," &c. I need scarcely describe the character of these dwellings,—they, in ordinary, exhibit the squalid appearance of destitution and wretchedness, being the haunts of beggars, tramps, trulls, thieves, in short of all persons who can be embodied in the epithet of the "refuse of mankind."

These "travellers' rests" are anything but places where men may rest; for, independent of the perpetual influx of guests at all hours, there are importations of vermin and filth, villanous compounds of smells, composed of the heterogeneous effluvia of decayed vegetables, onions, cheese, herrings, and brimstone, and often times mixtures of poisonous gases from impure sinks, foul drains, and dung heaps. No wonder, then, they become the nucleus for the generation of malaria, or form food upon which a contagious malady may fatten, and disseminate with energy its destructive elements.

This poor man was directed by the overseer to a house of this description, kept at that time by a man named William Leeke. The house was situated in a damp locality, in a part of Newport Pagnell still called "Marsh-end." The neighbourhood is low in every sense; and at that time two ditches existed near it, into which was thrown the refuse from the surrounding houses. These ditches were stagnant, and often times contained two or three feet of accumulated mud. The cottages were crowded with human beings, and very few among them had habits of cleanliness.

The man had not been an hour in the house before he was taken exceedingly ill. On his way from London he had had diarrhœa, but now was very sick and cramped. The old lodging-house keeper was alarmed at these symptoms, and, being gifted with a very small measure of humanity, he would not allow the man to remain. The poor fel-

low, therefore, sought refuge in another lodging of the same description, but lower down, and nearer to those marshy spots which had earned for the locality its name.

I was not the Medical Officer for the parish that year, so I did not see this case; but the man died on the following day. Now, mark the peculiarity of this visitation. The morning after the death of this vagrant, I was sent for in haste to the wife of an itinerant barber, living in a portion of William Leeke's house, contiguous—nay, in close connexion with the yard, and the room where the tramps lived. I had not heard at this time either of the illness or death of the first patient, but I learned the particulars in my attendance on this woman. I found for the last few hours she had been suffering from diarrhœa, the motions being colourless, like rice-water; her countenance was blue and ghastly; she was fearfully cramped, her pulse hardly perceptible, extremities cold—*vox cholerica*, with incessant sickness and insatiable thirst.

As the treatment of this case was peculiar, I shall state it *en passant*. Nothing in the form of medicine would rest a moment on the stomach; but she intreated—she implored, she might drink cold water. I directed a bucket of cold water might be placed by her bedside, and bade her drink as freely of it as she pleased. The gratitude of the woman knew no bounds, for what she considered as this great indulgence, for the people about her had prohibited the use of it.

She commenced in good earnest, drinking and vomiting incessantly, occasionally passing copious watery evacuations. She had consumed 52 quarts of water in 48 hours, and at the end of that period a slight tinge of bile was discovered in her excretions, —the sickness gradually abated, warmth returned to the extremities, and the patient became convalescent. The fever which supervened never assumed the typhoid form.

In the evening of this day Mr. Kipling, the Medical attendant of the parish, called upon me, stating his belief that Asiatic cholera had entered the town, informing me of the particulars of the death in the lodging-house; and the fact that he had just left a patient having all the characters of this fearful epidemic. He requested me to visit the patient with him. This man was a tailor, lodging in the house of a gardener, and only one door from Leeke's; the yards of each house being only separated by a low fence. We found him in the stage of collapse; he died before the morning. From this time cases were continually presenting themselves; and, with the exception of one lady, who was seized and died in the High-street, the whole of the cases were confined to the immediate locality of Leeke's house.

The parish became alarmed,—the authorities assembled, and a Medical Board was formed, to which I was appointed Secretary. The weekly documents then issued are now before me; from which it appears, that of mild and severe cases we had 100, of which 45 died; and, when it is considered that our population does not number 4,000 persons, it may be regarded as a severe visitation.

I submit the following observations as the result of my own experience, and of the deductions which I draw from that experience.

1st. As to whether the disease be contagious or not.

The outbreak in Newport Pagnell is clearly traceable to the arrival of a vagrant, who was discharged from the Coldbath Prison; whether the disease was prevalent at that time in the prison, I am not prepared to say,—or whether it existed in any other place, where he might have sojourned after his discharge. He had suffered from diarrhœa on the way. It would have been impossible to have found a spot better calculated for the development of any disease, than the wretched place to which the overseer sent him. After staying about an hour in this house, vomiting freely, and, in all probability, using the *cloaca* common to all, he is unceremoniously thrust out, and takes up his abode at another lodging-house, perhaps 700 or 800 yards from the first; here he dies.

Now, the cholera does not break out at his last lodgings, where his corpse lay, of course, some hours; but commences almost immediately in the vicinity, and under the roof of Leeke's house. The bed, however, upon which the poor man died, was exposed in the front of the houses in the neighbourhood of the last lodging-house, and close to the road. Here an incident occurred worthy our consideration. A poor woman, of the name of Judge, found her grandchild, had come home minus a shoe. She immediately went in search of this missing article, and, strange to say, found it under this very bed. She was very quickly seized with the premonitory characters of cholera—sickness and diarrhœa; she neglected them: the next day she was in the stage of collapse, and died a few hours after being visited by the Medical attendant.

Now, if the disease was truly brought by this vagrant,—left (so to speak) at the place where he first stopped, and around which the fierceness of the malady raged,—upon what principle can the propagation of the disease be accounted for, except by contagion? except by the fact, that the seed of a poison is left on a soil suitable for its development, —a soil every way calculated to give it activity and energy? It is no argument, that some are exempt from this poison; because in every disease there requires fitness on the part of the recipient. A barrel of ice will not ignite when a lighted match is put to it; but a barrel of gunpowder will: so there may be, and, doubtless, there is a resisting power in some bodies, sufficient to overcome a poison when applied to them.

2nd. Our experience tended to show that the removal of cholera patients concentrated the poison in the Hospital to which they were removed.

The National-school-room was converted into a hospital for cholera patients; now observe the following case:—

A poor woman came to my surgery, imploring me very earnestly to intercede in her behalf with the overseer. He had given her a peremptory order to go and act as nurse to the cholera patients in the Hospital, threatening in case of refusal, to withdraw her weekly stipend.

I saw she was sadly frightened at the idea of entering the place, and knowing how readily fear predisposes the body to infection, I did urge that she might not be sent. However, the overseer was inflexible, and I found her at her post the next morning. She was very shortly seized with cholera, and died very rapidly. In this case I have no doubt but fear opened the door to the enemy; but I cannot bring myself to believe that fear will induce Asiatic cholera, without the aid of some subtle poison, having a specific power to induce the disease.

3rd. During the concentration of the severe form of the disease in Marsh-end, diarrhœa prevailed universally—indicating, that however diluted the poison may be under the most favourable circumstances, it nevertheless does induce a condition of disorder, analogous to its own character, in one or two particulars.

4th. Very few of the cases removed to the Hospital had a fortunate termination. If they escaped the stage of collapse, they fell into the consecutive fever, and died of aggravated typhus.

I do not infer from this that patients should not be removed; but, if removed, the hospital to which they are carried should be replete with every necessary requisite, have ample ventilation, and its site should be elevated. Unhappily the public buildings of our town do not possess these advantages, and the one used was in every sense unsuitable; but *necessitas non habeat leges.*

5th. With respect to treatment. In this particular I would be careful to avoid that fault which I condemn, and be sparing either of nostrums or specifics. Cholera, like every other disease, is influenced both by habit, temperament, and idiosyncrasy; and it does appear to me exceedingly absurd to lay down rules in the treatment of disease, without especial reference to these peculiarities. The first point essential in the treatment of all maladies, is to thoroughly understand their true character, and to form a correct judgment as to their immediate seat. This may be, on some occasions, extremely difficult; but well-informed men, conversant with the received principles of medicine, having common sense, and inquiring minds, will not be long in chalking out for themselves a proper pathway, and the chances are, they will not go far astray. The men who fail are the men who won't think, and who practice a routine system, without reference to the influence of remedies, or their probable results, and with a shallow understanding of the enemy with which they have to combat.

My own experience and reflection leans to the belief, that cholera is a hæmorrhagic disease; that in this particular it has a peculiar and specific character, acting upon the vessels so that they let out the liquid particles of the blood, which pass off by the common excretions, and this view I regard as the great base and principle of practice. I consider the liver as partially suspended in its functions, and not only the liver, but all the secreting organs; that the brain, being deprived of its accustomed stimulus of quick-circulating and healthy blood, loses its power of eliminating electrical energy, and that thereby the heart and its vessels are doubly suspended—first, by the black, grumous material by which it is supplied; and secondly, by the deficiency of that nervous power, without which the best supply would be useless. Such results must inevitably ensue if the first position be correct, viz., the hæmorrhagic character of the disease.

The cold water cure was a beautiful illustration of this probable theory. The constant and reiterated application of cold to the stomach, acting as a tonic to that organ, and by contiguity giving tone and energy to surrounding organs. Although feeble as may have been the absorbing power of the lacteals, it may be fairly inferred, that some portion of this liquid was conveyed to the heart, gradually supplying that which was lost; and lastly, the revulsion produced by the incessant vomiting might have had some power in rousing the dormant liver, and thus causing that small flow of bile, which was the harbinger of safety, and which imparted to my mind the well-founded hope of a successful termination. To show the utter impossibility of laying down unvarying rules in the treatment of cholera, I may remark, that not one of our subsequent cases evinced this insatiable desire for drink, nor could the patients be induced to take more liquid than sufficed to quench their temporary thirst.

The cases which more immediately fell under my own treatment had always reference to the doctrine above stated. My first aim was, to check the diarrhœa and abate the severe cramps. I did not find the common chalk mixture answer nicely in these cases; it always appears to me to clog the bowels, even if it be retained; but, generally speaking, the stomach revolts at it. I found the powdered catechu, combined with opiate confection, and compound spirits of ammonia, sweetened to make it tolerable, the best astringent. I have always preferred the powdered catechu to the tincture; the latter containing the resinous part only, while the powder possessing earthy particles, seems to act more mechanically, and yet does not clog like chalk.

Calomel was used in large quantities, and in small quanties, in combination with opium and without it. In some cases most delightful results followed each of these plans; but in other cases they altogether failed. The same may be said of the saline treatment, which was adopted to some extent, but certainly not in the systematic manner laid down by Dr. Stevens.

In some instances I found advantage, in the very first stage, by the administration of a mustard emetic. One case I will record. A poor woman of the name of Healey died of cholera. The morning after her funeral, I was passing the house, when I saw the husband standing at his door. About an hour before he had been seized with diarrhœa, and at the moment I passed was writhing with cramps, holding himself by the door-post. I administered on the spot two large teaspoonsful of mustard mixed with nearly half a pint of warm water. I staid to watch the result. A violent fit of vomiting ensued. (He had not been sick previously, but complained of nausea.) This continued for an hour, at the end of which time the cramps had left him; and, although the diarrhœa continued most part of the day, no untoward symptoms presented; he required but little more to perfect his recovery. By-the-way, large mustard cataplasms over the bowels were found exceedingly useful.

I have already lengthened this article beyond my original intention. I will merely mention another

fact, which is interesting, and that has reference to the probable origin of cholera, or at all events, to the influence which electrical changes have upon its virulence and extinction. A fearful storm of thunder and lightning, with torrents of rain, took place towards the close of August. There had been some abatement, certainly, both in the number and severity of the cases, but the truth is, after this storm not another case presented itself in "Marsh-end." Three other cases did occur, but they were at another extremity of the town, two of which were fatal.

In presenting this succinct account of Asiatic cholera, as it appeared in Newport Pagnell in 1833, I am fearless of censure, and regardless of criticism, for I have merely detailed facts, and formed my theory on what appeared to my mind the legitimate deductions of common sense. It is true no *post-mortem* examinations were made, nor had we the opportunity of chemically analysing the alvine excretions, but the peculiar characteristics of the disorder, the languor of the circulation, the singular coldness of the extremities, and universal blueness of the skin, seem to point out at once, that the error was traceable to a faulty condition of the vital fluid. From all I have read of the late prevailing epidemic, there is no deviation in character from that which existed here in 1833, and my impressions continue as heretofore. Whatever may be the cause, the effect is hæmorrhagic, and there can be no doubt that the first step to remedy the evil is, to arrest the discharge of that portion of the blood which escapes in the first stages. This, in my humble opinion, can only be done by the most active and powerful astringents. When the bowels are staid, then, I opine, salines and neutral salts are indicated, with as much liquid matter as can be administered, simply with a view to supply that which has been lost. If, indeed, as in the case of the barber's wife, an incessant sickness takes place, and an insatiable thirst, I should then consider that the best remedy was, to follow nature, and, without being charged as a favourer of hydropathy, I should rest quietly on the unquestionable value of a cold water cure.

ON A NEW MODE OF TREATING DEAFNESS

WHEN COMPLICATED WITH PERFORATION OF THE MEMBRANA TYMPANI.

By JAMES YEARSLEY, Esq.,
Surgeon to the Metropolitan Eye and Ear Infirmary.

Some months ago I promised you, on an early day a communication on the singular fact which, many months ago, I had published to the Profession in the pages of a contemporary Journal; but which, up to this time, has not been noticed in the *Medical Times*. The pressure of other engagements has prevented me from fulfilling my intention until the present time. My task, however, is, in a great measure an easy one, inasmuch as it is only necessary to recapitulate the circumstances which led to my first observation of the new mode of treating diseased tympana, and which suggested to me the expediency of reducing it to practice until, from enlarged experience, I am now enabled to announce it, with confidence, as a grand and important addition to our remedial resources in a class of cases previously supposed to be beyond the pale of art, and the incurability of which had passed into a proverb.

No successful method had hitherto been brought forward for the relief of deafness, when attended by loss of the membrana tympani—the utmost that was attempted consisted in applying remedies for the alleviation of such cases by the removal of accumulated or offensive discharges by syringing, or rendering the cavity of the tympanum free, by the passage of air through the Eustachian tube. Although such measures were used without reference to the hearing, there is no doubt that great improvement did occasionally take place in that respect; but never with any lasting effect. Attempts were made (and, I am sorry to say, with many it is still the practice) to attempt the healing the perforation by the use of mercury internally, and applications of the nitrate of silver to the seat of disease itself; but, as far as my experience goes, it has generally been at the expense of the hearing, which gradually became, under such treatment, more and more torpid;—in a ratio to the success, has been the deterioration of the hearing. In speaking of mercury as a remedy in this or any other description of deafness, I cannot forbear putting my veto against its employment. Some of the extreme and most unmitigable cases of deafness I have ever seen were distinctly traceable to its pernicious influence. If there is in the Materia Medica a medicine which has the power of acting as a poison to the sense of hearing where there exists predisposition to deafness, I believe it to be mercury. Of course my strictures are directed, not so much against its exhibition as a purgative or alterative—though even here it is dangerous to the deaf—but when given with a view to its *specific* effect. Mercury injures the sense of hearing through the medium of the mucous surfaces in the same manner as when the guttural and aural mucous membrane is affected in influenza, dyspepsia, and the exanthemata. After its use, an erythematic state of the throat and fauces remains, often, by its persistence, affecting the Eustachian tube and tympanum, as when chronic catarrh has been the exciting cause. How often it has happened to me to hear of the rapid aggravation of a previously slow and insidious deafness after the use of mercury! Not long since a most distressing case of this kind came under my notice in the person of a lady, the wife of a medical man, who, some years ago, consulted me for a comparatively moderate degree of deafness. I laid down a course of treatment of which iodine was the basis. This was followed up for too brief a period to meet with success, and another gentleman was consulted, who unhappily put her on a course of mercury, which was persisted in, as it was thought, sufficiently long, but without any good effect upon the hearing. The practitioner thought the mercury should be continued, and it was so for many weeks, ending in total and hopelessly irremediable deafness! As a *dernier ressort*, the patient was once more brought to me by her physician, to undergo the operation of perforation of the membrane. With no expectation myself, this operation was performed, but without success. Here was a lady, whose deafness possibly might have been beyond the reach of human means, even from the first; still her hearing would have failed, by such slow degrees, with common attention, as to have been very many years, if ever, before it would have reached the extreme point to which it was brought, in a few short months, by the injudicious administration of mercury. I have seen so many similar and lamentable cases, that I should consider it a dereliction of duty were the subject of mercury, as a remedy in deafness, ever to come under my consideration, without calling forth my emphatic denunciation.

Hoping to be excused this digression, I now return to the subject of my paper.

It was in 1841 that a patient from New York consulted me for a deafness which followed scarlatina in early youth. Both membranæ tympani were destroyed, and there appeared to be great general disorganisation, leading me to believe, that little, if anything, could be done for him, when he surprised me by by saying, that he had the power of reproducing the hearing in one of his ears by very simple means, namely, by moistening the extremity of a spill or roll of paper with his saliva, and then introducing it to the bottom of the meatus. Sometimes it "opened the ear;" in other words, reproduced the hearing for some minutes only: at others, it was "opened" for hours, days, and even so long as a week. Whenever the ear closed, he had but to repeat the experiment to find it again successful. My patient thus called my attention to an interesting fact, which, it naturally occurred to me, might be turned to good account, in other and similar cases; but, although I made many trials, I invariably failed, until I adopted a plan of my own, which consisted in the application of a small piece of cotton wool, moistened in pure distilled water, warmed to the temperature of the body. The first case, in which I succeeded to my entire satisfaction, was a young lady placed under my care by Mr. Squibb, of Orchard-street. She had also become deaf from scarlatina, which had ended in destruction of the tympana. The hydrated cotton was entirely successful, and for seven years she has used it with the same happy effect as on the first day it was introduced. I may add, that, when removed from the ear, she becomes as deaf as when she first came under my observation. My success in this case prompted me, to continue my experiments, and, without going out of my way to look for appropriate cases, I lost no opportunity of trying it in cases of diseased tympana, which presented themselves to my notice, sometimes with remarkable success, sometimes without any advantage to my patient. It was soon made evident to me, that the remedy would only be serviceable in cases where perforation existed, thus most materially limiting the range of its usefulness. It was also evident, that I had much to learn in the mode of applying it, for in my earlier experiments I found that, in the same case, I sometimes succeeded admirably, and then again signally failed. This variability of success turned out to be attributable to the size of the pellet of cotton I used, to the degree of moisture it contained, but *most especially* to the dexterity and tact with which I could apply it to a particular spot; for I soon found, that unless it could be accurately and neatly adjusted on that identical spot, no good effect was produced; and so long only as it was retained there, was the hearing benefited. My patients have often expressed to me their disappointment on experiencing a sudden loss of hearing from the displacement of the cotton, which the action of the jaw in eating or yawning, or even a sudden movement of the body is liable at any time to produce; but I may observe, that this inconvenience is only momentary, when the application of the remedy has been properly taught, for then the patient is able to re-adjust the cotton instantly, and with unerring certainty.

Seeing that so many little observances and variations in the mode of applying it were essential to success, I was unwilling to publish any account of my novel remedy, until I could lay down rules which would be a sufficient guide to enable other practitioners to manipulate as efficiently as myself. For this reason, I held back for five years from making it known beyond the sphere of my immediate medical acquaintance, until a retired army surgeon became my patient, in whom it also proved successful. Fully alive to its importance, that gentleman thought proper to send a communication to a provincial paper, whence it was copied into others, and attracted eventually a great deal of attention. *Nolens volens* I was thus driven to bring the subject before the Profession, and here I may take the opportunity of observing that it will at all times give me unmixed pleasure to demonstrate before any of your readers this most interesting fact, for I am in justice bound to say that no mere verbal description of the process, however minute, will enable others to manipulate with success. Trifling as it may appear, it is no easy matter so to adjust the cotton as to produce the desired effect. I have inquired among practitioners most consulted in diseases of the ear in this country and in France, and they have had the candour to admit that they have but rarely succeeded. Mr. Barrett, Surgeon to the Bath Eye and Ear Infirmary, soon became aware of the difficulties which attended the uninitiated, and felt it necessary to pay me a visit to learn the mode of applying it. He is now an accomplished manipulator, and in a note recently received from him, he says:—"I continue to use the remedy with full and satisfactory results, and never omit to speak of it as your discovery, and to give you full credit for the whole matter. Indeed, whilst writing this, I have been interrupted by a visit from a gentleman to whom I mentioned I was writing to you on the very subject, the good of which he had such bright experience. He said, with tears in his eyes, "Tell Mr. Yearsley I feel that to him, by your help, I am in a new existence. I can now enjoy the comforts of my friends, my family, and the other blessings God has given me, but which for a time, till it pleased him to make Mr. Yearsley his instrument for good, I was deprived of.'" Dr. Noggerath, of Brussels, after alluding to the difficulty of adjusting the cotton, says:—"I have succeeded well in one case, and failed in some others. Probably

time and experience will give me greater facilities, and the cases of non-success will become less frequent." It must be borne in mind, that appropriate cases are not of every-day occurrence; and, in my own case, with all the advantages of an extensive public and private practice, I may truly say, that it was years before I could so mature my experience as to reduce my experiments to anything like a certainty. The supposed simplicity of the operation has induced many members of the Profession to try it in cases altogether inappropriate; and latterly it has been no uncommon circumstance to be applied to by patients whose deafness had been increased by the injudicious introduction of pellets of cotton, pushed down the meatus of the ear, *on speculation*, by themselves, or by their surgeon! It cannot be too strongly impressed on the minds of the Profession, therefore, that partial or entire loss of the membrana tympani is an essential condition of the ear for success.

I am aware that too voluminous a paper will not be acceptable. With your permission, therefore, I will continue the subject in a future number.

15, Savile-row, January, 1850.

P.S.—The bearer of this communication to you is an example of the beneficial use of the artificial tympanum. He is not yet an adept in its use; nevertheless, he is sufficiently *au fait* to withdraw and re-apply it in your presence, and an opportunity will thus be afforded you of testing the degree of his hearing, *with* and *without* the remedy. An anecdote in connexion with this case is worthy of record. The other morning, on coming to the Institution, he was nearly run over by a cab, which, though close upon him, he did not hear. The hydrated cotton was accurately adjusted, and he left to return home, in doing which he had again to cross the street. When half-way across, he was observed to make a sudden start, and run as if for his life. This was explained by his supposing that another cab was upon him, when, in point of fact, the cab which made the noise had only just entered Sackville-street from Piccadilly, the Institution being situated at the other end of this, the longest street in London without a turning, though not the longest street.

PROGRESS OF MEDICAL SCIENCE.

FRANCE.

[From our Paris Correspondent.]

AN UNLUCKY PRIZE.

Some fourteen or fifteen years ago a man of fortune, affected with disease of the bladder, left to the Academy of Medicine here a very large sum of money, as a prize for the person who should "make any remarkable improvement in the treatment of stricture of the urethra." Having had long experience of a practical kind,—that is to say, having been long practised on by surgeons,—the testator had many misgivings about the fate of his prize, and, therefore, expressly ordained that it should not be entrusted to the care of any banker; and that, if no important improvement in the treatment of stricture were made within six years, then the prize should be awarded to the author of the most valuable improvement in the cure of other urinary diseases.

This opened a wide field for competition, and, accordingly, there has been no lack of candidates; yet, strange to say, the most eminent surgeons of modern times could never obtain anything more substantial than an "honourable mention." As honeyed words, to use a vulgar phrase, can never "boil the pot," an ebullition took place in the minds of the disappointed candidates, instead of in their *marmites*, and soon gave rise to explosion. The Academy was summoned to produce, at least, the funds; when, alas! it turned out that they had been entrusted to a bankrupt banker; and that, if the Academy were to adjudge the prize it would be subject to an action at law from its own laureat. Hence the fiction of "honourable mentions," which must be perpetuated to the end of all time, to avoid the untoward chances of unlimited litigation.

NEW MODE OF CURING RETROVERSION OF THE UTERUS.

Nearly all obstetrical writers admit that retroversion of the unimpregnated uterus is a disease which is difficult of cure, if not absolutely incurable. M. Paul Dubois, Obstetric Physician to the Clinical Hospital, holds the latter opinion. On the other hand, M. Hervey de Chegoin maintains, that the complaint may be cured by mechanical means; and M. Amussat has published, this week, a Note relative to a new mode of cure by surgical operation.

The principle of M. Amussat's method is extremely simple. He excites ulcerative inflammation between the opposite mucous surfaces of the vagina and back of the os uteri; obtains adhesion of this latter part to the posterior wall of the vagina, and thus keeps the uterus in a natural position.

Amongst the numerous cases cited by M. Amussat in support of his practice, the following appear worthy of record:—

A Lady, 41 years of age, had laboured for a considerable time under various distressing symptoms, the chief of which were, difficulty of digestion, frequent palpitations and sickness of stomach, abundant leucorrhœa, pains in the loins, groin, and thighs, &c. The menstrual discharge was always regular, though copious. Her complaint had been treated as dyspepsia by one of the first practitioners of Paris, when she consulted M. Amussat. On examination, the uterus was found somewhat lower in the pelvis than is natural; the os tincæ was open, red, and deeply eroded: the fundus of the uterus enlarged and carried backwards; in a word, it was a case of retroversion, complicated with engorgement of the uterus, and erosions of the lower part of the organ, both externally and internally.

A piece of sponge, and afterwards a pessary, were introduced, but gave only moderate relief. The erosions were now cauterised; and corresponding surfaces of the vagina and neck of the uterus were also cauterised. The effect of this latter process was to cause membranous adhesions between the cauterised points, which retained the os tincæ close to the posterior surface of the vagina, and thus threw the fundus uteri forwards. The dyspeptic symptoms now gradually disappeared, and the patient was found in good health twelve months after the operation. The caustic employed by M. Amussat is a solidified mass of lime and potass, which is applied rather lightly to the os uteri, at its back part. Some lint-plugs are then introduced in front of the neck of the uterus, to press it backwards, and the caustic which remains on the neck, coming in contact with the wall of the vagina, causes ulceration of this part also, and enables the two opposite tissues to unite. In a few cases the posterior wall of the vagina was cauterised likewise, for fear the quantity of caustic which remained on the neck of the uterus might not be sufficient. Many practitioners may think that the altered position of the os uteri may derange the functions of the organ; but M. Amussat has, on the contrary, observed improvement instead of derangement. Thus many females who had never borne children previously, became pregnant soon after the cure of the retroversion. M. Amussat also has observed that menstruation also becomes much more regular and easy. From the above brief notice of facts, which do not rely on the mere assertion of the author, but have been witnessed by many other practitioners, it does not appear too much to conclude that surgeons at length possess a safe and efficacious mode of correcting retroversions of the uterus. M. Amussat promises to publish, in a short time, the result of his experience in the treatment of other displacements of the organ.

NOVEL MODE OF PARTURITION.—A CHILD VOMITED UP.

Apropos of displacements, I may mention a case related by the Spanish journals, which, if authentic, would be unique in the annals of medicine. A young married woman, Maria de la Cruz, labouring under yellow fever, was suddenly seized with violent vomiting, and with great difficulty threw up a fœtus four months old, which was speedily followed by its placenta. The woman died on the following day, and, on examining her body, a communication, four inches in diameter, was found between the uterus and the intestinal canal.

VELOCITY OF THE NERVOUS FLUID.

M. Helmholtz, Professor of Physiology in the University of Kœnigsberg, has endeavoured to solve the difficult problem of ascertaining the velocity with which the nervous fluid travels. A frog was chosen for the subject of experiment, and the Professor endeavoured to determine the time taken by the nervous fluid to pass from the sciatic plexus to the gastro-cnemius muscle of the animal. The following was the mode adopted by the author in this delicate experiment. The frog's sciatic plexus was placed in communication with a galvanic machine, and in the inductor circle of a double helix. The muscle was so disposed as to raise a certain weight when it contracted, the weight reposing by a platinum point on a gilded plate of metal. The moment the inductor circle was interrupted a current traversed the sciatic plexus, and developed muscular action. But, by a peculiar arrangement, another galvanic circle was established at the same instant between the weight suspended to the muscle and the platinum point.

This second circle remains closed until the muscle raises the weight and separates it from the point, and the time taken to traverse it will, therefore, be equal to the time taken by the nervous fluid to pass from the sciatic plexus to the muscle. The former of these two measures is easily ascertained by the magnetic index of the galvanometer, and the *intensity* of motion communicated to the index was taken as directly proportioned to the duration of the current. The measures were taken by means of a mirror and telescope; and the author found that the space between the irritated points of the nerves being from 50 to 60 millimetres, was traversed in 0·0014 to 0·0020 of a second, or about 130 feet in the second. The substance of the above facts was communicated at the last meeting of the Institut.

HIPPURIC ACID IN THE BLOOD.

At the Biological Society, MM. Dollfus and Verdeil announced the interesting discovery of hippuric acid in the blood of the ox. The number of experiments made removed all doubt which might have existed as to the presence of this acid being due to an accidental cause. We must, therefore, add a new element to the blood of animals, and, perhaps, of man also; for it seems highly probable that hippuric acid is the result of the transformation of our tissues.

ALBUMINURIA IN PREGNANT WOMEN.

M. Blot, one of the *internes* at the Maternité, has made this disease the subject of an interesting thesis, from which some practical conclusions may be derived. It is not always connected with disease of the kidney, for the Author found these organs perfectly healthy in three cases out of six, examined by him after death. In the three other cases, he found the lesions which M. Rayer has assigned to the third degree of Bright's disease.

Albuminous urine is of rather frequent occurrence during pregnancy. M. Blot observed this in 41 cases out of 205. As to its connexion with puerperal convulsions, which many writers regard as well proved, M. Blot has found the urine invariably albuminous during eclampsia; but, on the other hand, many females have albuminuria, without necessarily being attacked by convulsion. The proportion of cases observed by M. Blot was only seven in forty-eight.

MEDICAL REFORM IN SPAIN.

Medical education has undergone a radical change in Spain within the last few months, by Royal ordinance. Henceforth there are to be two classes of schools. In the superior one, confined to the Universities of Madrid, Barcelona, and Seville, every branch of medicine will be taught. In the secondary schools of Valencia, Santiago, Salamanca, and Grenada, instructions will be confined to therapeutics. The pupils, as in France, must take out a diploma of Bachelor in Science previous to matriculation, and five years' study will be required even in the secondary schools.

MEDICAL HONOURS.

The Grand Turk has sent the Order of Nicham to M. Rostan and M. Jules Cloquet. The decoration, as you know, is one of the richest in the universe; but this time the diamonds were replaced by a bit of shrivelled parchment.

SCOTLAND.

[Edinburgh Correspondence.]

IS CONSUMPTION CURABLE?

At the Pathological Meeting of our Medico-Chirurgical Society on Wednesday, February 20th, another conversation arose on the Curability of Tubercular Phthisis. This conversation followed the exhibition by Dr. Spittal, of a portion of lung containing a considerable cavity, which had no communication with the bronchial system. The specimen was taken from the body of a woman who had been found dead, and no account could be obtained of her previous state of health. An adhesion between the pleuræ had been observed near the apex of the left lung; and the lung being cut into at this place, a considerable cavity was discovered. There was a good deal of dark matter deposited in both lungs, and near the cavity there were some nodules of grey consolidated matter, and, in its walls, some white matter. The appearance of the cavity, however, was not such as to carry conviction, that it was a closed tubercular cavity; while it was not more easy to pronounce that it belonged to any of the other known forms of pulmonary cavity; namely, a dilated bronchial tube, an excavated abscess, or a cavity left by circumscribed gangrene. Dr. Bennett exhibited a beautiful engraving on wood of the appearances presented by a lung, in which, according to his view, tubercular cavities had become cicatrised. The preparation from which this engraving was made, Dr. Bennett had formerly brought under the notice of the Society. The case was striking—a person employed as a clerk in Edinburgh, and who lived a dissipated life, became affected with very well-marked symptoms of tubercular consumption; but, at this time receiving the appointment of a parish schoolmaster, he went to the country, where he recovered his health, and lived a regular life about twenty years. He then returned to Edinburgh, and falling into his former irregular habits, was cut off by delirium tremens. The *post-mortem* examination showed the decided appearances of tubercular cavities long before citcatrised, as delineated in the engraving.

The evidence now accumulated of the curability of phthisis is very imposing. Dr. Bennett called on the senior members of the Profession present to state their experience on the subject. The opinions expressed, though not of a very decided character, were generally favourable to the idea of the curability of tubercular phthisis, when the disease has not made great progress.

It seems strange that any doubt should exist as to the curability of phthisis, when it has been the usage of the Medical Profession, from the earliest times, to recommend to persons affected with this disease so strong a measure as the expatriation of themselves to distant countries for the sake of a cure. Celsus advises the phthisical to go to Egypt—a piece of advice which has been revived in our own day. Bearing on this step of change of climate, there are some points in the pathology of phthisis, the attempt finally to clear up which should be made without delay. Why, then, are the phthisical sent abroad, notwithstanding the prevailing belief, that the disease is wholly incurable? To this question very various answers will be given—some will say that there is a cachexia phthisica antecedent to the formation of tubercles, and that this cachexia may be cured by a change of climate; others will say that phthisis has its origin in obstinate catarrhal affections, and that this precursory disease may be got rid of by a milder temperature; others, again, will say that tubercles are deposited in successive crops, and that the constitution can relieve itself of one crop, provided that, by change of climate, or by some other means, the crops that so usually follow are prevented from overwhelming the function of respiration, and, through it, the curative powers of the system. The first and the last of these views may be considered as one in the meantime, the most vital question at the present moment being how far bronchial inflammation is distinct from the tendency to the production of tubercles in the lungs. It was a very early opinion, that catarrh degenerates into consumption—an opinion which still holds its ground tenaciously enough with the Profession, however slender may be its foundation. It does not clearly appear who was the first to call this so universal opinion in question. Considerably before the end of the last century, Cullen is found to say, "that it appears probable that a catarrh is very seldom the foundation of phthisis;" again, "that the beginning of phthisis so often resembles a catarrh that the former may have been mistaken for the latter;" and, "that in the few cases of catarrh, which can be said to have ended in phthisis, it is probable that the persons affected were peculiarly predisposed to phthisis." Considerably before Cullen's time, Huxam made the singular and somewhat confused remark, that many cases of consumption occurred after catarrh, especially where tubercles had been previously formed. Laennec's decided opinion against the long-supposed connexion between bronchial inflammation and the origin of tubercles, is universally known to the Medical Profession; yet it has too commonly been assumed, that the controversy, as to the inflammatory or non-inflammatory origin of tubercles, has no distinct practical bearing. But, as the general question plainly involves the special question, namely, whether or not catarrh degenerates into tubercles, the decision of the latter, at least, is a necessary preliminary to any exact reasoning as to the curability of phthisis; otherwise, how can we determine whether the so-called cases of incipient phthisis, which are every year cured by a change of climate, be mere catarrhs, or cases in which there was already a limited development of tubercles. If to cure a chronic catarrh in a person constitutionally disposed to phthisis, be not tantamount to removing the cause of successive crops of tubercles, then we shall be entitled to insist, as often as a true incipient phthisis may be checked, that, however limited for the time, the means, nevertheless, exist, of stopping directly the further formation of tubercles. But were this view firmly established, there is a new field opened up for the investigation of untried therapeutical indications, and, in the search after such indications, care must be taken not to lose sight of what Laennec so much insists upon, namely, that tubercles terminate favourably, not by abortion, but by changes consequent on their full development and the evacuation of their cavity.

TUMOUR OF THE KIDNEY.

The discussion on this subject being over, Dr. Gairdner exhibited an enormous tumour, involving the left kidney and left suprarenal capsule. It was taken from a man sixty-four years of age, who had been under the care of Dr. Craig, of Ratho. He had suffered an injury thirty years before his death by a wheel passing over his loins. After some confinement he recovered from this injury, and led an active life till 1846, when some signs of ill health appeared, the urine being bloody. He recovered, however, and, owing to a change of occupation, he was for the next three years exposed to much exertion by long walks. In the spring of 1849 his health began decidedly to fail, his illness being accompanied with feverishness tending to periodic; and, finally, a very moveable tumour began to be felt in the left hypochondrium, which, when he turned on his right side, fell into the epigastrium. There were no symptoms of disordered urinary function at this time, with the exception of the presence of oxalate of lime in the urine. Latterly, inability to retain the urine and fæces came on, along with paralysis of the lower extremities. Before death there was no other evidence of the kidney being involved in the disease than the bloody urine and the like, which accompanied the patient's illness nearly four years before. Dissection showed a very large tumour, containing portions of healthy kidney occupying the region of the left kidney, and extending from that site in every direction. The lower dorsal vertebræ, the upper lumbar, and the adjacent ribs were in a state of exfoliation. The moveable tumour discovered before death must have been the displaced spleen. The tumour probably commenced in the left supra-renal capsule, and acquired its present final character by absorption of the chief part of the left kidney.

FALSE MEMBRANE OF SEROUS CAVITIES.

Dr. Gairdner next exhibited a singular instance of false membrane lining a great portion of the arachnoid sac in a preparation taken from the body of a lunatic, who had received an injury of the head some years before death. This membrane Dr. Gairdner pronounced to be an example of the membrane produced in serous cavities, not by inflammatory action but by the fibrine of extravasated blood, a subject well described and illustrated by Dr. Prescott Hewett in the twenty-eighth volume of the *London Medico-Chirurgical Transactions.*

IRELAND.

[Dublin Correspondence.]

ROYAL IRISH ACADEMY.

A meeting of this regal body lately took place, at which, among other things, was a paper by Dr. Allman, on the Anatomy and Physiology of the "Alcyonella;" which the Author regards as nearly allied to the MOLLUSCA. An immense range of animal forms, it need scarcely be said, range themselves under this latter term,—all those, where the vertebrate and its homologous types are absent, including, of course, the radiate families, and those with the peculiar disposition of organs round the mouth that distinguishes that section. The anatomy and physiology of this large tribe of animals is not without interest. The lowest tribes, fixed like vegetables to a single spot, possess a beautifully complex arrangement of organs adapted to digestion and circulation, with respiratory powers also very well marked. Without any well-arranged type or symmetry, like the *Radiate*, the lower tribes are little else than a mass of viscera, well seen in the *Aplysia*, till we come to the Cephalopods—the cuttle fishes—where the character becomes better defined, merging into the higher tribes of the animal scale. Many other points of interest have been noticed in the structure of the Mollusca; their white blood, with sparse corpuscles adapted to their particular mode of life; their low temperature, familiar, of course, to the reader. It may be sufficient, however, to note the interesting paper, which, of course, will appear in some other shape.

Dr. Todd, it was stated, read a communication at the same meeting, announcing a discovery to "prevent evaporation" from open drains, tanks, and ponds. In a sanitary point of view such a thing would be very valuable. A sum of 150*l.*, also, was recommended by a Committee for a system of meteorologic observations, with the resources of the magnificent Electric Observatory in the University, and the correspondence of its able conductor with all the men of Europe engaged in similar inquiries. A set of such observations would be highly valuable.

PHTHISIS AND PULMONARY GANGRENE.

In continuation of the subject of Dr. Stokes's paper, perhaps it may be mentioned, that he has changed his opinion as to *gangrene* of the lung being more frequent in drunkards than in temperate individuals; his immense experience, since he first broached the subject, having brought him in contact with it as often in the latter as in the former. The *fetor of the expectoration* and *excessive pain*, with the exceptions already mentioned, seem the most peculiar signs of the disease. The absence of physical signs is, indeed, quite remarkable. From his experience, he is led to believe, that the disease commences in "points of the lung," with intervening healthy tissue; and he impresses the deeply practical conclusion, that, where sudden fits of fœtid expectoration occur, even though the stethoscope should detect nothing, we can in no way pronounce the lungs healthy, and should look on the matters in the gravest light.

On the subject of *Phthisis*, two rather novel points have been mooted lately. In a highly interesting paper by Duncan, he says, following out the analysis of Simon, that tubercle is a minus or imperfect protein, produced by mental causes! acting on the nervous system. This seems a great way off to go for the source of phthisis. The facts related, however, are very striking. Every one, of course, is aware of the action of mental causes in disturbing the process of healthy digestion and assimilation, and, as assisting an already strumous diathesis in particular individuals, should not be forgotten by

the practitioner. The point has been noticed, perhaps, before. On looking into Watson, for instance, speaking of the contagion of phthisis, he seems to explain it something after this very fashion:—"Watching, the want of rest, confinement in the unwholesome air of a sick chamber, and, above all, *protracted mental anxiety*, than which no single cause, perhaps, has more power to foster and forward the inbred tendency to phthisis." To Duncan, however, we are indebted for the *modus operandi*, and other details, of mental influences. In the practice of this disease, a second point has been brought forward by Fitzpatrick. He is inclined to think he has discovered an additional physical sign in phthisis, available in the early stages. The *discrepancy of the normal bronchial respiration*, on one side of the chest, compared to the other, when tubercles are forming, taken from a central line,—not to be confounded, of course, with bronchial respiration so often heard under the clavicle, in the more advanced and less mistakeable forms of this fearful malady, the point is one obviously of no little interest, and, as available at the only period when human means are of use, it is doubly available. Perhaps we might suggest a stethoscope for the purpose, of gutta percha, in the form of a Y.

TAPPING IN HYDROCEPHALUS.

The propriety of having recourse to this formidable expedient has been brought under discussion at the "Dublin Surgical Society," by Dr. Battersby. As might, perhaps, be expected, much difference of opinion was elicited; the more ardent members looking upon it, with Ferguson and Conquest, as a matter not to be given up; others, less hopeful, as an operation never to be attempted. In the acute form of the disease, the nearly unanimous feeling of the Society was against it; in its other forms some little evidence existing for it.

RHINE WINES.

The Editor of the *Medical Press*, alluding to the composition of Rhine wines, as lately put forward rather prominently by one of your contemporaries, thus feelingly expresses his experience:—"It has been our misfortune to partake of some of these so called Rhine wines, and our firm belief is, that they were nothing but very sour cider and water with some whiskey,"—(nothing half so good, say I,)—"and, perhaps, a dash of alum. We shall never forget the treat as long as we live." *Dura ilia messorum!*

EPIDEMIC CONDITION OF THE ATMOSPHERE.

Some singular phases of epidemic diseases, as depending on vicissitudes of the weather, have been lately noticed in Ireland; in Carlow, something like cholera has broken out; in Dublin, Dr. Kennedy and Dr. Benson have drawn attention to the nature of a peculiar form of fever for some time prevalent. The former describes it, as marked by intense hoarseness and aphonia, with a singular tendency to relapse quite characteristic. A remarkable latency of chest diseases, was also dwelt upon; a stage of incubation, as it were,—if we may borrow from Sir Henry Marsh,—in which the usual stethoscopic signs are absent; cases occurring of that singularly occult nature that we must judge of them by the rational symptoms. "No râle in well-marked bronchitis, no crepitus in pneumonia, no grofflement in pleuritis," percussion alone detecting anything wrong. Dr. Kennedy ascribes these peculiarities to the marked vicissitudes of the atmosphere,—at one time quite warm, then suddenly cold,—producing, of course, electric and other changes.

SELECTIONS FROM FOREIGN JOURNALS.

NARROWING OF THE RIGHT SIDE OF THE HEART.

A long and able paper has appeared in the *Prague Vierteljahrschrift*, by Dr. Dittrich, on an interesting case of stenosis of the right heart succeeding injury. A strong young soldier, twenty years old, received a heavy blow in the cardiac region; hæmoptysis and cough succeeded. Subsequently he became anasarcous, and fluid collected in the peritonæum. After death a circular, hard, callous contraction, the result of an exudation, was found on the right side of the heart, six lines below the origin of the pulmonary artery, the valves of which were thickened and rough, but competent. This contraction, which allowed only a quill to pass, had, of course, produced the same impediment to the flow of blood as a contraction at the mouth of the pulmonary artery. Great hypertrophy of that ventricle, situated below the contraction, had succeeded. Above the contraction, between it and the pulmonary valves, was a space about the size of a hazel nut. The case is particularly interesting, as being an unique, or almost unique instance of disease, originating in the right side of the heart itself, and not being consequent on, or simultaneous with, disease of the left side of the heart, or of the lungs. (*Vierteljahrschrift, Prag. Erst. Bd.*, 1849, p. 157.)

THE SARCINA VENTRICULI.

It is stated by Mettenius that the sarcina was described by Meyer in 1809 (*Nov. Act. Acad. C. L. T.* xiv.), and was afterwards termed Merismopedia punctata (Ehrenberg's Gonium glaucum, tranquillum, and hyalinum). Mettenius himself considers it to belong to the Palmalacea, the lowest order of Algæ. (*Zeitschrift. fur. rat. Med.* 1849, vii., 3). Frerichs describes the development of the sarcina as follows:—First occur round cells (about 1-400 line in diameter), which gradually increase to 1-300 line; they enclose no nuclei, and are mostly isolated. They never are thread-like, and thereby, and by their size, are distinguished from the cells of the yeast plant. At first, in such cells, superficial indentations form, which are placed at right angles to each other. These crucial lines always commence in the centre, and pass gradually to the circumference. In this way the cell gets divided into four equal parts, without much increasing in bulk. This four-parted cell is always formed in this way, and not by the disintegration of more developed forms. From this elementary form, the division of each primary fourth into secondary fourths, and of these into tertiary fourths, goes on, but the division seldom reaches to sixty-four parts before the sarcina breaks up. The shape is not always square; it is sometimes oblong. Frerichs considered the sarcina allied to the "Cladosporium fumago;" it has not been seen to increase out of the body either in the vomited matters, or in bread or other substances. Pockels also had lately examined the sarcina; he also has never observed any growth out of the body. He has obtained the blue colour with iodine, which Frerichs failed to do, by boiling with nitric acid and caustic potash, neutralizing the liquids, and adding sulphuric acid and iodine. In the sarcina passed by stool, the sulphuric acid and iodine act at once. Simon, in a case in which a great quantity of the yeast plant and the sarcina were vomited together, believed he could trace the development of the one into the other. The sarcina, however, can only develope within the body; its successive divisions may go on to a great extent. In a case lately recorded by Horing, of chronic hydrocephalus, the sarcina was found in the vomited matters. This observer has found it also in a case of cirrhosis of the liver; in one of tubercle of the brain in an adult, and in a case of chlorosis. Sometimes food was mixed with it—sometimes not. Horing believes the sarcina to indicate no special diseases either of the gastro-intestinal membrane, or of other parts.—(*Jahresbericht von Canstatt und Eisenmann*, 1849, *Vierter, Bd.* p. 225.)

THE DIFFERENTIAL DIAGNOSIS OF CANCER AND HYPERTROPHY OF THE STOMACH.

The following points may be of importance towards the differential diagnosis of these conditions. But, it must be understood, that they refer only to pure well-marked cases, and that for the complicated or combined instances there is no general rule, nothing but the details being sufficient.

1. Hypertrophy, or the increase of the normal substance of an organ, with retention of its texture and figure, appears in the stomach as a gradual, and more or less uniform swelling of the gastric membranes. Cancer, which is always a true after-growth or new structure, takes, with few exceptions, the form of a swelling; and appears as a circumscribed, prominent, often knobbed or tuberculated, after-growth, which destroys the normal structure of the tissues.

2. Hypertrophy, even where it is the result of a cancerous construction, is characterised by a *gradual* swelling of the membranes, having the proportion of their natural increase of thickness towards the pylorus; while, on the other hand, cancer may be situated in any possible part of the stomach, and always exhibits a partial degeneration of the membranes.

3. In hypertrophy, often only one membrane, (viz., the muscular,) suffers, and in its whole extent. In cancer, on the contrary, very often several membranes become transformed into one common after-growth.

4. Even where many membranes are hypertrophied, they are always seen as particular layers, lying over each other; while in cancer sometimes any, sometimes all, are irrecognizable.

5. The division of the muscular coat into compartments is not characteristic of cancer. On the contrary, even where it occurs in true cancer, it only signifies hypertrophy of the muscular tunic.

6. In hypertrophy the coats are, at first, in spite of their thickening, separable from each other; in cancer they are fused in the after-growth.

7. In general and pure hypertrophy, the stomach is always narrowed and hardened. In cancer, especially of the pylorus, there is usually considerable dilatation and thinning.

8. Hypertrophy may precede the cancerous new growth, and occurs as a partial hypertrophy of the neighbourhood simultaneously with the cancer, or it is associated with cancer of the pylorus, as a secondary event, when constriction appears. In the latter case, the (general ?) dilatation remains.

9. Chronic gastritis occurs as well in hypertrophy as in cancer; but it would appear that, in the first, it is more as a cause; in the last, as an effect.

10. In hypertrophy, a large portion, or the whole of the mucous membrane is more frequently diseased; while in cancer, a great extent is commonly still normal.

11. The diagnosis during life is trustworthy only in those instances where appearances of constriction are present; since, in other instances, hypertrophy is scarcely accompanied by any other symptoms than those of chronic gastritis.

12. A sensible knobbed swelling,—especially when sharply defined,—or many knots of a tumour in the epigastrium, speaks decisively for an after-growth of the pylorus, and against a pure hypertrophy; while, on the contrary, a diffuse resistance and swelling of the epigastrium speaks for the latter condition, especially when the hard part corresponds to the form of the pyloric portion of the stomach. (That the swelling is impalpable, does not definitely exclude cancer.)

13. Displacement of the stomach, with sensible hardness, speaks for the great probability of an after-growth.

14. A limited and permanent sonorous sound on percussion, speaks for general hypertrophy, (narrowed and hardened walls;) a diffuse and inconstant sonorousness for cancer, (dilated and thinned walls.)

15. Vomiting at definite periods, especially many hours after eating, speaks very certainly for cancerous constriction. (Dilatation of the stomach without gastritis.) Continuous vomiting in the fasting state, or immediately after each ingestion, rather for hypertrophy, (*i. e.*, for narrowing of the stomach, and for chronic gastritis,—which latter certainly becomes augmented in the last stages of cancer.)

16. The quality of the matter vomited depends, not so much on the form of disease, as on the condition of the gastric mucous membrane. Black (or "coffee-grounds") vomitings signify nothing but effusion of blood in the stomachal cavity.

17. In the case of a cancerous softening and destruction of the mucous membrane, in which elementary parts of the after-growth may be evacuated, the microscopic examination of the vomited matters must not be omitted.

18. A long duration of the disease, and an unbroken progressive development, speaks for hypertrophy. Cancer generally runs its course in from one to two years.

19. A sudden intermission of the vomiting, and of the other appearances of constriction, with subsequent return, accompanied by a sensible swelling, is one of the surest indications of cancer, (commenced softening.)

20. The absence of appetite is more frequent in hypertrophy, (diffuse disease of the mucous membrane;) good appetite is more usual in cancer, (partial disease.)

21. Pain refers either to the mechanical inconvenience of the aftergrowth, or to chronic gastritis. It is therefore not characteristic.

22. The constitutional effect depends on the narrowing, the chronic gastritis, or the suppuration; and on the secondary events of emaciation, pain, obstruction, &c. It is, therefore, altogether of relative import.

23. With respect to ætiology, continual mechanical injuries (local influences, as in shoemakers, weavers, &c.) appear more to dispose to cancer. While spirit-drinking, gluttony, and nervous conditions (especially morbid and continuous nervous vomiting), seem to conduce to hypertrophies. Acute and chronic inflammation appear of equal efficiency for both.

24. The existence of an isolated swelling once established, the diagnosis of cancer from other aftergrowths is scarcely of much practical interest. But lipoma, fibroid, or alveolar gelatinous tumours, or the benignant tumours generally, are indicated by the mildness of their phenomena and the more frequent absence of constriction. Besides, they do not soften, and hence they lack those symptoms which depend on this change. Disseminated deposits in other organs, namely, in the liver, together with the existence of a circumscribed swelling in the stomach, of course affirm cancer.—From an Essay entitled "*Ueber Magenkrebs und Hypertrophie der Magenhäute in Anatomischer und Klinischer Hinsicht*" *Von Dr. Carl Bruch, Privat Docenten in Heidelberg, Zeitschrift für Rationelle Medizin, Band VIII., Heft. 3.*

BLOOD AND URINE IN CHOLERA.

The following observations have been recorded by Dettingen, (Warsaw.) In the algide stage, the blood was found extremely thick, very dark coloured, and forming a black, homogeneous, tarry mass. The coagulability was generally diminished. The dark colour was only partially removed by agitation with air. The specific gravity of the defibrinated blood varied from 1062 to 1077. The water was diminished and varied from 650·65 to 711·83, the mean being 680 per 1000 parts. The highest figure of the fibrine was 4·61, the lowest 1·51; in one very rapid severe case there were only traces of fibrine, which were not weighable. The blood corpuscles were always increased, in direct relation to the intensity of the symptoms; they varied from 141·4 to 157·3. The albumen was increased, also in relation to the symptoms, from 110·9 to 153·6. (It does not appear whether the extractive matters of the serum were separated from the albumen, most probably they were not.) The salts were not determined. Under the microscope the red particles were not found to be altered. In the urine, in the cold stage, when secreted, the sp. gr. was from 1013 to 1017; sediments were uncommon; albumen, but in small quantity, was always present. A blue colouring matter (*blauer Farbstoff, Uroglaucin*) was, with one exception, present or increased in an extraordinary degree. The urophœin was also increased. Uric acid, urea, and chloride of sodium were constantly diminished. The two latter substances were, indeed, sometimes present in mere traces; the phosphates and sulphates were in normal, or even increased proportion. In the stage of re-action, the urine had nearly the same characters. —*Vierteljahrschrift für die prak. Heil. Prag.*, 1849. *Viert. Bd. Analek.*, p. 12.

(The observation made by Oettingen, of a *blue* colouring-matter in the urine of cholera, which is termed by him the "uroglaucin" of Heller, is peculiarly interesting, inasmuch as observations have lately been made in this country, by Begbie and Parkes, which prove the existence in cholera urine of a substance derived, probably, from the bile, which gives a violet, or dark red re-action with nitric acid. It has been stated by Parkes, that this substance may be converted into a blue pigment, and that it is, in fact, identical with the substance described by Heller as a normal urinary pigment, under the term of uroxanthin. The observation of Oettingen, that the blue pigment may appear at once in the urine, tends strongly to confirm this opinion, and to show that the change which Parkes produced artificially, may occur naturally in the substance which passes off in the urine of cholera.)

DIAGNOSIS BETWEEN ARTICULAR RHEUMATISM AND GONORRHŒAL ARTHRITIS.

M. Cazanave distinguished between the affections above named by the following rules:—Gonorrhœal arthritis developes itself usually in the fifth or sixth week of the blennorrhagia; the pains are almost always in the knee, sometimes in the elbow or ankle; they do not affect all the joints, and never affect the muscles. If articular rheumatism be uni-articular—*i. e.*, confined to one joint—it is usually more severe and obstinate than in gonorrhœal arthritis.—*Gaz. des Hopitaux*, Jan. 26.

DENTITION IN OLD AGE.

M. Plessinck has lately witnessed, in a woman aged 92 years, the successive appearance of three incisor teeth. Some weeks afterwards two molars appeared. The teeth were loosely fixed in their sockets.—*Gaz. des Hopitaux*, Jan. 24.

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THE MEDICAL TIMES.

SATURDAY, MARCH 9, 1850.

*** We have to request that all communications for the Editor be addressed to the care of Mr. John Churchill, Medical Publisher, 46, Princes-street, Soho.

We must also impress upon such of our Correspondents as address us anonymously, the necessity of favouring us with their names; not, of course, for publication, but as a pledge of good faith.

The Hunterian Oration is a discourse pronounced annually in the theatre of the College of Surgeons. During the first five minutes of its delivery, the name of Hunter can be heard a certain number of times, and reference is made to those rare, but, by this time, well-known qualities, which our great Surgeon manifested. After having discharged this duty, the orator usually abandons himself to the inspirations of his genius, and dismisses, to sleep for another year, the vexed memory he had invoked. On the present occasion, Mr. Skey's genius has led him to enunciate, for the benefit of the Profession, his opinions respecting medicine in general, and medical practice in England in particular. The circumstances of the moment have given unusual significance to the views of the orator, who may be said to represent the feeling of the College which nominates him for its spokesman. Mr. Skey is the voice of the College. What, then, says this voice respecting the great topics it called up before its hearers? We hear it speak of the Profession's "degradation," of its loss of social status, of its depression, of its "degeneration." Its accents embody the acknowledgment of great evils, the recognition of sad deficiencies, the expression of incontestable imperfections. Can we collect the meaning of these sounds, submit it to mental analysis, weigh it with the scales of right and truth, and see what lesson we can extract for our guidance and direction?

Alas! when this is done, the voice which has issued from the College walls sounds feeble, vacillating, and uncertain; it utters truths, but the truths are fruitless; it arrays propositions which lead to nothing; it enunciates principles which it leaves half way on the road, as if afraid that, like Saturn's offspring, they may destroy their parent.

What is the burden of the oration? The giant evil of the day (as respects the Profession) is, want of education; therefore educate. The curse of the Profession is, the fictitious value placed on medicines; therefore let the service be paid, and not the mere instrument. The labours of the Profession are unrewarded by public distinction; therefore, let us mark with a title of honour our eminent leaders. The moral tone of the Profession is low; therefore raise it by judicious instruction.

Is there anything to object to in all this? Not an iota; but, on the contrary, much to applaud. It is truth; it is incontestable. We want education; we demand just and proper methods of remuneration; we press our right to civic honours; we wish to strive after true morality, as regards the public and our brethren. But what then? What is to follow? The Hunterian Orator cannot surely stop at such platitudes. It needs no oracle to din these homely facts into our ears. It is what we have known any time these fifty years. We admit your premises without pleadings. Educate the Profession; let each man be a scholar and a gentleman; let each man work at his calling as at a divinely-appointed task; let each man cultivate his intellect and his taste by as deep a study as you like, of Nature and of Art; let each man respect his fellow-worker as an honest labourer in a common cause. Agreed, at once and unanimously. We do not want such teaching in this blessed nineteenth century, which is already waxing old. What we *do* want is to know, How we are to do that which you tell us should be done? It seems to us we have asked this question at your College gates these many times, but to our demand for bread your surly janitors have always given us a stone. It seems to us that we have not been idle in urging these great truths on your fellow-Councillors, and in begging them to aid us in clothing them with shape and action.

Unfortunately the Hunterian orator, at the point when he ought most to speak, suddenly becomes mute. Either his words have been stifled, or he has not wished to speak, or has not known what to utter; or, more likely still, he has never pushed his principles to their logical conclusions—but has bounded his view by the prejudices of his caste. To know the evils of the Profession, he has only to look around him; therefore, he eloquently and truthfully enunciates them. To find their remedy he has to look within that narrow pale, through whose difficult entrance he has lately passed; therefore his sight suddenly waxes dim. He commits the solecism of entering on a subject, which he knows beforehand he cannot conclude.

If we may venture to criticise the Hunterian Oration, we should imagine that it was written with little premeditation or care. It is eloquent; it is ingenious; it is sometimes equal momentarily in thought and

expression to high models among our standard writers; but it is without arrangement; it is illogical; it intermingles somewhat confusedly Medicine as a Science with the men who practise it—now we have an eulogium on the grandeur of our calling, and speedily we fall direct from Heaven to Apothecaries'-hall. But the great and irreparable mistake is, that Mr. Skey has broached the subject of professional grievances, and has shirked the topic of professional redress. He shoots his arrows from a practised bow, but they range idly o'er the realms of space. His oration will be but of little benefit, for it has no fixed and determinate aim.

We are of opinion that Mr. Skey has missed a great opportunity. If, after his somewhat bitter enumeration of our short-comings, he had boldly proposed to himself the task of indicating their remedy, he would have earned, whatever might have been his opinions, the gratitude of all. At any rate we should have seen a man, who not only felt our wrongs, but had energy to attempt to repair them in the way which seemed to him fittest. We should neither have suffered the contemptuous sneer of those who say, "thus you are, poor, degraded, uneducated, as we deem you, and thus you will remain," nor should we have had the still more sarcastic lecture of the man who tells us that it is a shame for us to be degraded, to be degenerated, to be uneducated, and yet while castigating the errors, holds out no friendly hand to cleanse us from them.

The inference which Mr. Skey might have drawn, we are tempted to draw for him. We are tempted to ask him, what his College have done to arrest this "degeneracy," of which he speaks so bitterly; what amount of anxiety and friendly solicitude have his fellow Councillors exhibited in the "degradation" of their professional brethren? Have they not endeavoured—are they not endeavouring, to lop off as a decayed and hurtful member, the great body of Practitioners, who are, in reality, the Profession, instead of aiding in the restoration of the limb to health? Does not the College wish to raise itself in the eyes of the public, by severing all connexion, if it can, with these "degraded, degenerated, and uneducated" General Practitioners? Has it not sought—does it not seek, suicidally seek, to thrust aside that torrent of Reform, by the means of which the Profession hopes eventually to remedy the evils which have been inflicted on it by its incapable, selfish, and misguided leaders? And if the answer be a true one, we may then draw this inference for Mr. Skey,—that whatever be the evils of the Profession, his College must be, in a great measure, accountable for them.

And to this inference we may add this warning—let Mr. Skey believe that the days of his College are numbered. In another quarter of a century, let any one ask what has become of the old Corporation of the Barber Surgeons? It will be found dwarfed and insignificant beneath the colossal form of its triumphant rival; or it will have been deprived of an existence which had become useless, and have been merged and absorbed in the active, energetic, and efficient Institution which the General Practitioners, who were denied admittance by the narrow policy of the present College of Surgeons, will have founded for themselves and for the Profession.

A weekly Contemporary, whose strong common sense and nervous masculine style need no commendation from us, has, in a few brief words, exactly indicated what the College of Surgeons are now doing; they are "reposing the Medical care of the bulk of society in a proscribed class." The *Spectator*, in praising, and justly praising Mr. Skey's enumeration of professional errors, has yet, with the instinct of genius, indicated the very point on which the attention of Government will ere long be fixed. The College of Surgeons, in "proscribing" the General Practitioners, are injuring, not merely the Members of the Profession, but also that great mass of society, whose health and life are committed to those Members' care. The quarrel between the Members and the College is no "internecine warfare;" no simple matter, which interests only a small and insignificant class. On the contrary, society itself is injured by whatever tends to lower the efficiency of the class of men who minister to its infirmities. Let Government, then, legislate for the good of society, and disregard that petty oligarchy, who have shown themselves incompetent to meet the necessity of the time.

THE MEDICO-CHIRURGICAL SOCIETY.

Friday, the 1st of March, 1850, will long be memorable in the annals of the Royal Medical and Chirurgical Society of London. On that eventful day, one of the largest meetings of the Fellows ever remembered took place within its halls. The question at issue was self-government and independence or antiquated usage; and, although the contest terminated in favour of the party in power, their triumph will be but temporary, since the victory was only obtained, in a very full house, by so small a number, that a single figure, and that not a large one, would express the actual majority. Nearly four score independent Fellows registered their votes against the system hitherto pursued in this learned corporation, and notwithstanding the active *whip* made from almost every hospital in London, as, likewise, the influence of ex-officials, expectants, private friends, *et hoc genus omne*, the movement party almost carried their object—physically they were unsuccessful, although morally triumphant.

We are no enemies of the Royal Medical and Chirurgical Society, but zealous friends, desiring its reform and regeneration; anxious only that any feelings of dissatisfaction which now rankle in the minds of some Fellows may be removed, and that all may cordially work together, to promote the advancement of Medical Science, and the prosperity of that scientific Institution. If this desirable object is to be accomplished, no preference must be given to individuals excepting according to their merits, and to the services they have rendered to the Profession. Fellows who have published papers in the Transactions, and those who are assiduous in their attendance at the evening meetings, or have claims from seniority, ought always to be preferred for any marks of distinction at the Society's disposal.

During the debate which ensued, after the President's Address to the Fellows last Friday, some very curious details, illustrative of the system hitherto pursued in the management of this learned body, were mentioned by Dr. Webster. As the facts stated were not denied by any person present, but seemed to be admitted by one of the Council, who took part in the discussion, the statements made by the former gentleman must be considered as correct and unanswerable. Space does not permit our now entering upon the various topics alluded to by Dr. Webster; but, speaking generally, there must be "something rotten in the state of Denmark," when it is shown, that upwards of two-thirds of the resident Fellows have never served on the Council; that more than half the contributors to the Society's Transactions—the working bees of the hive—have never been so honoured; while several Fellows have filled office during five years; some nine, and others even for ten or more years; thus excluding many from the Executive, whatever claims or standing in the Society they may possess. However, after the display at the recent and previous Anniversaries, especially the great numerical array of arguments in the form of votes, brought forward last Friday in Berners-street, and which might be, perhaps, increased in number on a future occasion, we trust the ruling powers, still in the ascendancy, will take warning and introduce such meliorations in the Institution, that all just cause of complaint among the Fellows in opposition, or otherwise, may be removed. It should also be remembered, as a great statesman once said to his followers, in a well-known Assembly, that "a cloud was rising in the *West*, which they ought not to disregard." We should regret exceedingly were any cloud in the west, or one coming from the east, to throw the slightest shadow over the Royal Medical and Chirurgical Society; and to avert such catastrophe every well-wisher of Medical Science should cordially unite, in order, by judicious reforms, to improve and renovate its constitution. This proceeding appears the more necessary, as a professed advocate, in a contemporary, acknowledges that "like the sun, there may be some spots on its surface." We acquiesce in the remark, and wish to remove such blemishes.

Should the new Council persist in traditional opposition to the large and independent minority, we cannot doubt that, as new Fellows are added, it will be forced to succumb. But if, as we anticipate, that body wisely yields, we shall be among those who will rejoice that its members were saved from defeat by a majority small enough to indicate, in no halting phrase, the mind of the great body of the Fellows, yet sufficient to save them those unpleasant feelings which an ignominious expulsion from office would have engendered.

Let the members of the Council remember, that although by their majority of seven they have gained time, they have in reality gained nothing more.

PARISIAN HOSPITALS.

ST. LOUIS.

The Hospital of St. Louis is one of the oldest and largest in the French capital. It was

founded in the year 1607 by Henry IV., the same monarch who founded the old Hospital of St. Anne, which has now disappeared; La Charité, and that part of the Hôtel-Dieu which occupies the Rue de la Bucherie. An epidemic and contagious disease, which prevailed in Paris at the commencement of the 17th Century, suggested to the King the idea of creating two special establishments destined for the treatment of the malady. He therefore had two Hospitals built,—one, St. Anne's, on the South side of the city, in the Faubourg St. Morceau; the other, St. Louis, in the fields on the North side. The Hospital, however, received its present name from Louis IX., who made many additions to it after his return from the Crusades, and assumed the patronage of the establishment.

The circumstances that attended the foundation of St. Louis gave to the old Hospital the peculiar character which, for more than a century, distinguished it from all other establishments of a similar kind. The most minute precautions were taken to prevent the spread of contagion, either internally or beyond the walls of the building. Hence its double circle of walls,—its double courts, cutting off all communication with the city,—its strange old tower,—and, above all, the mysterious gallery for the transmission of food, with other means for converting it into a perfect Lazaretto.

Yet, with all these precautions, one of the simplest rules of hygiene was neglected for nearly two centuries. The patients in this, as well as in the other Parisian Hospitals, were placed three in a bed,—a practice the more injurious and disgusting, since the Hospital was devoted to the reception of persons labouring under contagious diseases of the skin, itch,—in its worst forms,—ulcer, scrofula, &c. This abuse was swept away by the great Revolution, and an efficient surgical service was added for the benefit of the numerous workmen who abound in the crowded neighbourhood of the Temple.

St. Louis can now accommodate about 800 patients affected with cutaneous diseases, scrofula, and rheumatism. Syphilitic diseases of the skin are also frequently treated there; and the number of accidents that occur amongst the workmen, located around, give rise to many interesting surgical cases or operations.

The consulting practice, every morning, at St. Louis, is most extensive, and of a kind which distinguishes this Hospital far above any other of a similar nature. Out-patients, from every quarter of Paris, assemble to receive, not only advice, but orders for medicine, baths, fumigations, and other external remedies. From seventy to eighty cases of skin-disease may here be seen of a morning, and it has been calculated that more than 50,000 baths, 40,000 fumigations, and 3,000 douches, &c., are administered every year. The expense of this enormous service does not, however, exceed 20,000*l. per annum*. The mean mortality of the Hospital for a period of ten years (1804 to 1814) was 1 in 26, and the average duration of treatment is 32 days.

The Physicians of St. Louis are all well-known to the Profession:—Emery-Lugol, for his Researches on Scrofula; Devergie, the great Medical Legist; Gibert and Cazenave, for their works on Cutaneous Disease. The Surgeons are Boyer and Malgaigne. As a Clinical Hospital, St. Louis is little frequented by students except during summer, on account of its great distance from the School of Medicine. Hence the Clinical Lectures are generally given from May to August. The Conferences on Diseases of the Skin are held in the open air, under a tent erected in one of the Hospital squares, and attract, as they well deserve to do, a crowded auditory. The plan followed by the Lecturer is to select some one variety of skin disease, on which he dissects for about half an hour, and then directs the attention of the pupils to all the patients present, who may labour under this form, indicating the peculiarities, &c. This done, some twenty to thirty cases are examined, and the pupils exercised in the difficult art of diagnosis. No Medical man, who visits Paris during summer, should neglect attending a few of these interesting Conferences. From them he may learn more in a week than he could pick up during years of private practice. They have been the foundation of the fame which St. Louis has acquired as a School of Cutaneous Disease, and have furnished no small contingent to the superb work, now in course of publication, by M. Cazenave, on Diseases of the Skin.

DOES THE COLLEGE OF SURGEONS BELONG TO THE COUNCIL OR THE MEMBERS?

The College of Surgeons is at its old tactics. Private influence and official intrigue have been again resorted to for the purpose of biassing the Government upon the subject of Medical legislation. These efforts will be vain. The tortuous paths of diplomacy are now well known, and the Profession hold the clue to the official cabinet.

Scarcely had the Council of the College returned their answer to the Council of the National Institute, than they hastened to the Home Office to urge upon Sir George Grey the reception of their proposed regulations as the basis of a new charter; and, doubtless, also to suggest other matters in relation to the general question, in accordance with the notions faintly shadowed forth in their Letter to the Institute. We can believe anything of the Council of the College,—except *one* thing,—that they will be successful in their grasping, artful, and underhand policy. They may attempt what they please, but they will be obliged in the end to do what pleases the Profession. There can be no mistake now as to what the Council desire, and what the Profession demand; the two parties are at issue upon great principles, and confront each other with stern and defiant gestures. The Council say that they will not grant this thing and the other; but we tell them that it is not in their power to withhold anything. The College belongs, by right, to the Members, and before this battle is finished, they will have recovered possession; and they will make of it such an Institution as they will. This is a mere question of time.

The Profession must manage their own affairs. Our Councils must govern upon the principle of *representation*; and every qualified member, as a gentleman and a man of education, must be eligible to vote for the governing body. Upon this broad basis the Profession must take their stand; and they need not then fear the machinations of party, the treachery of false friends and disguised enemies, the contumelious arrogance of College Councils, or the insincerity and procrastination of Secretaries of State. The longer this contest may last the stronger the Profession at large will become; for every well-directed blow that is struck at the College will make the Council more feeble and irresolute, and convulse it with new terrors. There is no real strength in parchment. Charters borrow all their virtue and power from public opinion, and if the Profession are resolved that the present *régime* shall be abolished, and new principles of Government adopted, as sure as the sun lights the heavens, the truth of their principles will penetrate into the chambers of the Home Department, and the demands of an indignant Profession will be submissively conceded.

In their recent Letter, the Council have not honestly stated the case between themselves and the Members. They assume, that the College is *theirs*, and that the Members are not entitled to the exercise of any rights in it, even upon principles of equity. They say, that the Members have neither been invited nor compelled to join the College, but that they have "VOLUNTARILY" presented themselves for its diploma. What a Jesuitical trick is not this! Commend us to such casuists to assuage the terrors of an alarmed conscience! Voluntarily, forsooth! Has not this Council procured from the Government the enactment of certain laws, inflicting pains and penalties upon all General Practitioners who are not members of their College? Is not every man educated for his Profession in England, disqualified for an office under the Poor-law Board, or in the Medical departments of the Army and Navy, and the Ordnance, who is not a Member of the College of Surgeons? Every man who does not possess their Diploma is actually shut out from all these important appointments, through the management and intrigue of this very Council; and yet they have the unmisgiving temerity to tell their Members, that they have no just claims upon the Council for admission to corporate rights, as they *voluntarily* offered themselves for their Diploma! The Members were *compelled* to join the College, or suffer deprivation of office, injustice, and popular suspicion. There is no compulsory power in their Charter, it is true; but such a power does exist in Acts of Parliament which this Council were instrumental in procuring. The statement of the Council is a shabby evasion of the truth, and the more criminal because it was not necessary.

A cause propped up by such arguments must surely be in a tottering condition. A long and a strong pull will make the College rock on its foundations. We confide firmly in the sagacity and stout-heartedness of the *National Institute*, the only body that can govern the events of this great crisis. We trust them with the helm, for none are so well-acquainted as they with the rocks and shoals between which the Profession must steer, and we have confidence in their good pilotage.

Let every man, who has not joined it already, join that body without loss of time; for each man's name is a power of the highest value, whose strength is much needed. There are 30,000 men whose interests are involved in the settlement of this dispute, and every man, from the youngest to the oldest, is bound to lend his aid to promote the righteous cause for which we are now doing battle. If the day be lost, whose will be the fault? YOUR OWN! Regrets and recriminations will be in vain when you are degraded, ruined, and for ever disgraced by defeat. The Secretaries of the *local Associations* must prepare to re-organize their respective bodies, for much will depend upon the voice from the provinces. Let the trumpet blow no uncertain sound, for without *decision* and *union* ALL WILL BE LOST!

THE DEPUTATION TO SIR GEORGE GREY.

A DEPUTATION from the Meeting of Delegates, held at the Hanover-square Rooms, had an interview, on the 4th instant, with Sir George Grey, for the purpose of representing to him the feelings and opinions of the Profession in consequence of the recent proceedings of the Council of the College of Surgeons. The Deputation, which was large, was received with great courtesy. The Letter addressed by the Council of the College to the Council of the Institute formed, of necessity, the subject of comment, and the sentiments and views which it expressed underwent consideration. The Deputation claimed, for the General Practitioners, the right to control the affairs of their own class, and adhered firmly to the principles which the Conference have already propounded.

PUBLIC MEETING OF THE PROFESSION.

OUR readers will observe, by a Notice in our advertising columns, that the National Institute contemplate calling a Public Meeting of the Profession to take into consideration the present aspect of Medical affairs. This is a wise measure, and we trust that the Profession, *from all parts of the Kingdom*, will assemble on that important occasion. This must be a great meeting, for on it the interests of Surgeons in general practice, and of the Licentiates of the Hall will, probably for many years, depend. The Colleges are busy with the Government; and, unless the Profession display not only determination but *numbers*, their cause will be in grave peril. Let the Government understand, that the Profession cannot be partitioned and allotted exactly as the Colleges may, according to their convenience, arrange; but that the claims so long advocated and contended for, must be respected and enforced by legal provision. The General Practitioners, in particular, cannot be dragooned into a discipline which, in its operation, may be oppressive and regardless of their interests. Whatever actual form the organization of the Profession may eventually assume, the Profession must regulate their own affairs upon the representative principle, amply acknowledged and freely exercised. Whether the College of Surgeons, or a new and independent College, be the head, it must be also the House of the Profession, in which every man shall stand upon an equality in respect to collegiate rights, and where merit shall exercise an honoured ascendancy. Let the proposed meeting be in reality an AGGREGATE MEETING, whose resolutions the Colleges and the Government may regard with respect.

THE CLAIM OF THE PROPOSED NEW COLLEGE TO EXAMINE IN SURGERY.

WE desire to place before the Profession, as clearly as the case will admit, the point of variance between the College of Surgeons and the National Institute, with respect to the powers proposed to be granted to a new College of General Practitioners. This point forms the hinge upon which, at this moment, all the efforts of these bodies revolve. It constitutes an historical crisis, and may form a precedent for future agitation. The National Institute demand for the new College the unrestricted power to examine in all branches of study necessary to general practice, *including surgery:* the College of Surgeons are prepared to allow the demand in every respect *except surgery*. Thus, there is a chasm dividing, apparently, contiguous territories, but in reality wide and profound. The National Institute assert that their claim was fully admitted by the Delegates from the College of Surgeons at the conferences with the other bodies. The College of Surgeons deny that they ever made such a concession. The position taken up by the National Institute is in fact a practical accusation of breach of faith against the College of Surgeons. Under such circumstances we think it best to appeal to neutral testimony, and now publish for that purpose the evidence of Dr. Christison, one of the members of the Conference, and a man whose ability and impartiality will not be gainsayed.

MINUTES OF EVIDENCE TAKEN BEFORE THE SELECT COMMITTEE ON MEDICAL REGISTRATION, &C.
12th May, 1848.

R. Christison, Esq., M.D., examined by Thomas Wakley, Esq.

2006. You read a resolution, dated April 8th; are you aware that, at the last examination, it was found that a difference of opinion had prevailed, with reference to what had been agreed to between the Representatives of the College of General Practitioners and the President of the College of Surgeons?—Yes.

2007. That the President of the College of Surgeons understood that it should be a *sine quâ non*—that the College of General Practitioners should not examine in surgery practice, and the representative of the College of General Practitioners had stated to this Committee, that he understood that the Council of the College were to have the unrestricted right to examine upon surgery; the production of the resolution which is now before the Committee, leads them to infer that the subject was again introduced to the notice of the Conference at your last meeting; is that so? I merely asked for a copy of the resolution which had been come to upon that matter, in order to reconcile the apparent discrepancy of opinion between the two gentlemen in question.

2008. Was not the subject re-discussed? It was not, because it was considered that this resolution settled it.

2009. You say, that it was considered to be settled by this resolution?—*That resolution empowers the College of General Practitioners to examine in Surgery*, while there is to be a special examination in Surgery by the College of Surgeons.

2010. The resolution is as follows:—"That the Royal College of General Practitioners ought to be possessed of the unrestricted right to institute such examinations as it may deem necessary for testing the competence of those persons who intend to practise as General Practitioners; but that it ought not to institute special examinations in Surgery? What meaning was attached, at the Conference, to the word "special" as it is here introduced? The meaning was, that there should be a *distinct* examination by the College of Surgeons on surgery, but that *that should not preclude* the College of General Practitioners from examining in Surgery along with other subjects of examination.

2011. That was stated to be the understanding?—That was the understanding.

This evidence clearly affirms that the right to examine in surgery was conceded to the new College of General Practitioners by the Conference. Two opinions cannot be entertained by reasonable men with respect to the meaning of the resolution, and the College of Surgeons are unquestionably guilty of bad faith. What then? "Corporations have no conscience," and no sense of shame; but they have *power*, and they can be combatted successfully only by that strength and purpose which *union* alone can confer.

PUBLIC HYGIENE.

ON DRAINAGE, AS IT AFFECTS THE HEALTH, WEALTH, AND MORALITY OF SOCIETY.

No. IV.

Country Ditches acting as Drains.—Old System of draining Lands.—Most approved modern Methods.—Surface Drainage and thorough Drainage compared.—Construction of Drains.—Villa and Cottage Grounds.—Importance of proper Drainage.

It is certainly not generally known, and as little suspected, that Fleet Ditch actually extends as far into the country as Fryern Barnet. So much has been said of late concerning London gullies, with all their horrid effluvia, that they may be said to have attained a large amount of odious popularity; but we cannot allow them to monopolize all the interest of this subject. Not to gainsay the paramount importance of attending to London gullies, a great deal remains to be said of country ditches. As you pass along the roads a few miles out of London, intending to enjoy a salubrious walk, ride, or drive, you are very likely to inhale a poisoned atmosphere during at least one-half of your excursion.

The drainage of the suburban districts of England is in a very bad condition, and there are few localities worse in this respect than many portions of the lands which surround London. This is in some respects attributable to a comparative neglect of drainage, and in others to the bad systems by which it has been sought to effect the object. To give an account of all the erroneous methods that have been adopted must not now be attempted, because a description of the improved systems will claim all the space that can be allotted to this paper. We must content ourselves, therefore, with a glance at the old plan of "ridge and furrow," generally adopted by agriculturists.

This old system of "ridge and furrow" effects no more than to drain the surface, while it leaves the soil full of moisture beneath. The water that flows away by these means, carries off with it a great portion of the finer particles of the soil; and with these, of course, very much of the manure and fertilizing matters,—perhaps all those which are soluble, and have not already sunk beneath the surface. During periods of a storm of rain, or other overflow of water, the greater part of a top-dressing of manure on these lands is frequently carried into the ditches and water-courses.

The history of drainage in Great Britain, may be briefly told in the words of Dr. Shier:—

"Till the time of Smith, of Deanston, draining was generally regarded as the means of freeing the land from springs, oozes, and under-water, and it was applied only to lands palpably wet, and producing rushes and other aquatic plants. The old method of draining springs was to form a drain, or culvert, of sufficient capacity to carry the water under ground to lower levels, thus preventing the water from bursting out on the surface of the land. When several springs occurred in the same field, or vicinity, a main drain was laid along the lowest level with a leader to each eye."

Oozes, or outbursts of water, gradually forming marshes, or a line of springs making marshy spots,

were dealt with by cutting off the water as near its source as possible, by an intercepting drain, which conveyed it to lower levels.

As for the removal of under-water, as well as surface-water, the old system of frequent-drains may often be advantageously combined with the modern process of thorough-drainage.

The method now approved by the practice of our most experienced and scientific agriculturists, and which Smith, of Deanston, has systematized up to the present time, instead of draining over the surfaces by ridges and furrows, levels the whole land as flat as possible, (except where raised for the growth of the plant,) and drains downward into under-ground channels. By these means the fine earthy powder of the soil is left within it, and the surface particles of manure, and loose animal or vegetable matter, are carried down among the roots of the plants. It is this filtration, combined with the preservation of the manure in the soil, that renders thorough drainage so productive, independent of the permeability, increased temperature, and better condition of the soil which thorough drainage induces. The action of a soil, made permeable to air and moisture, has been ably elucidated by Dr. Madden, of Penecuick, in a lecture on the preparation of soils for the reception of seeds, published in the Transactions of the Royal Agricultural Societies of England and Scotland.

The retaining of manure and fertilizing particles in the soil which has been subject to thorough-drainage, and the flowing away of the greater part of those fertilizing matters by surface-drainage may be easily tested by the following fact:—

"When there happens to be two outfalls into the same main from the same description of land,—the one an outfall from surface-drained land, and the other an outfall from under or thorough-drained land, the water from the thorough-drained land (if the drains be properly laid so as to effect a perfect filtration) may be seen running as clear as crystal, while the water from the surface-drained land will be thick and muddy from the solid particles which it contains."

For the construction of drains we cannot do better than follow the rules laid down by Mr. Smith, of Deanston, and Mr. Josiah Parkes.

The first rule for the position and direction of drains is, that they ought invariably to run down the steepest descent, and parallel to each other. The water by this means has the shortest way to percolate in getting into the drain, and, when once there, its delivery into the mains is effected at the most rapid rate. The parallelism of the frequent-drains is only to be departed from when the nature of the surface, or the direction of the boundary lines of fields, renders it necessary to do so. In England the irregular undulation of surface renders thorough drainage liable to be badly planned, even when there is the best reliance on the principle.

The direction of the mains and sub-mains depends entirely on the nature of the ground and levels. When the surface is undulating, the rule is to lay a main of sufficient size along the principal hollow, with sub-mains along all the secondary hollows, the small drains opening into these generally at right angles. Mains require also to be introduced whenever the length of the small drains becomes so great as to give them more water than they are capable of delivering.

With respect to the frequency of the small drains, the distance at which they are placed apart depends on several circumstances. The nature and texture of the soil; the depth at which the drains are to be put in; and whether it is surface water only which they have to deliver,—must all be taken into consideration.

As for the depths and distances of drains, stiff clays have frequently been cut 2 feet deep, and 24 feet between the drains; and porous soils 3 feet deep, and 33½ feet asunder, with good effect. But drainage at 4 feet deep, wherever a sufficient outfall can be obtained, has since been practised; progressive experience having ascertained, that depth consists with the economy of outlay, as well as with superior effect. Hence, drians of 4 feet depth, in soils of varied texture, have been found efficient at 50 feet asunder. They may be executed at a cost of about 2*l.* 5*s.* per acre; being 18*s.* 4*d.* for 871 pipes, and 1*l.* 6*s.* 6*d.* for 53 rods of digging.

"The best materials," says Dr. Shier, "for the construction of the water-way of the frequent-drains, are tubes, tiles, and soles, water-worn pebbles from the sea-beach, harped gravel, or broken stones. A decided preference should be given to tubes over tiles and soles."

Grass and tillage land may, by possibility, be over-drained. The object of drainage is not to deprive the land of moisture, but to adjust the quantity so as to produce the highest degree of fertility. In regard, however, to villa occupations, and other small suburban residences, the chief thing sought is the immediate drying of the soil. In these cases, therefore, closely laid drains may be requisite to ensure a rapid discharge of surface-water, particularly from the footpaths. It will, of course, be understood, that roads and foothpaths cannot drain downwards by percolation, but over the surface.

"It is important," says a Report of the Metropolitan Sewer's Commission, "in reference to the suburban districts, to allude to the effect that drainage would have on the vigour and growth of trees. It has been determined by observations, that if the annual increase of trees on undrained land were 3 per cent., the increase on drained land would be 6 per cent.; and on land both drained and irrigated no less than 12 per cent., or four times the amount of the growth on the undrained land."

The proper drainage of suburban villas and cottage plots is of far greater importance than the mere question of profit and loss in the garden produce, or the growth of trees. Agues are frequently a consequence of the neglect of drainage in country residences, and sometimes typhus fever and dysentery. Instances have occurred of the prevalence of typhus and dysentery in these and other undrained localities, and of their rapid subsidence and eventual disappearance after a proper drainage had been effected.

REVIEWS.

Surgical Anatomy of the Arteries. By the late VALENTINE FLOOD, M.D. New Edition. By JOHN POWER, M.D. Dublin. 1850.

We are very doubtful of the great advantage to the student, of treatises upon particular divisions of anatomy. The study of descriptive anatomy is necessarily a long one. It is the first pursuit of the student, and it is the basis of all Medical practice; it must be acquired, therefore, as thoroughly and quickly as possible, and in a manner by which it may be retained the longest. Now, for this purpose, it is found that some Work on Anatomy, which may be used by the bedside of the subject, which shall describe each part and relation as they are brought to view by the scalpel, is the best; the student's mind is by it directed to the general relations of muscles, vessels, and nerves rather than to the particular description of one or the other. He learns these parts as they would occur to him in performing operations on the living subject, and he learns, besides, that most important part, surface anatomy.

We have read with great pleasure the second edition of the late Dr. Flood's "Surgical Anatomy of the Arteries;" and while we think that it, with other like treatises, fails in usefulness to the student, we can most warmly recommend it to the surgeon.

It commences with the anatomy of the pericardium and heart, and gives the most truthful description of them, and especially of the right auricle, we have yet read.

We would refer the reader to the sketch of the terminations of aneurism of the aorta (p. 22); to the account of the points in which the right and left common carotid differ in the first part of their course (p. 32); to the relations of the subcarotid artery, (p 55,) and of the abdominal aorta, as specimens of accurate description, and of clear and impressive style. The demonstrations given of the axilla and perinæum are admirable. We do not agree with the Editor, however, that all the additions he has made "render the work more acceptable to the student." The circulation of the blood in the liver and kidneys does not belong to a treatise on the Surgical Anatomy of the Arteries, and the long descriptions of operations for the ligature of the vessels belong rather to a work on Surgery than to Surgical Anatomy; but we thank him for the cases of aneurism treated by pressure which he recounts.

In 1828 Dr. Flood published his Anatomy and Physiology of the Nervous System, a book most clearly written, and not unworthy to be read, even in the present day. His Anatomy of the Arteries has now reached the second edition. His death from fever in 1848 has deprived us of an excellent anatomist, and we should have gladly hailed a larger work on Anatomy from his pen, for we still want a series of demonstrations more neatly written, and more apt to teach, than those of Mr. Ellis.

Annals of Anatomy and Physiology. Conducted by JOHN GOODSIR, F.R.S.S., L. and E., Professor of Anatomy in the University of Edinburgh, &c., &c., Pp. 96. Edinburgh: Sutherland and Knox.

A Quarterly serial, to be devoted to Anatomical and Physiological subjects, was, we think, a desideratum. We are glad that it has been undertaken by so able a cultivator of those sciences as Professor Goodsir. The present Number, the first, is a very able one. It contains a most elaborate account of the muscles of the tongue, by Mr. J. Zaglas. A Paper by Mr. H. D. S. Goodsir, on the Anatomy of Forbesia. An Account of some Monstrosities, by the late Dr. John Reid. A Good Description of the Structure of the Glands of the Alimentary Canal, by Dr. Allen Thompson. A note (of three pages) respecting the Dimensions and Refracting Power of the Eye, by the learned Professor of Natural Philosophy in the University of Edinburgh; and an account, possessing considerable merit, of the Structure of the Spleen, by Dr. Sanders, which, in a shorter form, has already been communicated by the Author to this Journal.

A Quarterly List of British and Foreign Memoirs and Papers is appended. This Bibliographical Index appears to us very full and complete. To those engaged in anatomical, pathological, or physiological pursuits, this department will prove invaluable. The getting up of the Work is excellent; and we strongly recommend it to the notice of our readers. There is one alteration we would suggest for the consideration of the conductor—it is, that the plates should be placed at the end of the papers to which they refer. We have felt the inconvenience of their being separated from the descriptive letter-press. In Dr. Sanders's paper, this has been obviated by placing the description of the plate, as well as the plate itself, at the commencement of the Paper.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

FEBRUARY 26, 1850.

S. SOLLY, Esq., Vice-President, in the chair.

PROFESSOR ROKITANSKI.

A certificate, recommending that Professor Rokitanski be elected an Honorary Fellow of the Society, was read amidst much applause, and ordered to be suspended for the usual time in the library.

ON THE PROXIMATE CAUSE OF ALBUMINOUS URINE AND DROPSY,

AND ON THE PATHOLOGY OF THE RENAL BLOOD-VESSELS IN BRIGHT'S DISEASE.

By GEORGE JOHNSON, M.D., Assistant-Physician to King's College Hospital.

The author commenced by an allusion to his two previous communications published in the Society's Transactions, in which attention had been directed

chiefly to morbid changes occurring in the secreting cells of the kidney. He had now to describe a remarkable morbid condition of the renal blood-vessels, and to suggest an explanation of two of the most common and important symptoms of diseased kidney —viz., albuminous urine and dropsy. In accordance with Henle's description of the arterial tunics, he had observed that the renal arteries contain two layers of muscular fibres, the inner being longitudinal, and the outer circular. In all cases of chronic renal disease, with greater or less destruction of the secreting cells and tubes, the author had observed great hypertrophy of the arterial walls, the canal of the vessels remaining pervious and of the normal size, until the extreme stage of the disease, when an accumulation of oil-globules frequently occurs within them. The Malpighian capillaries in the same cases are also much thickened, but present no appearance of muscular fibre. In the last stages, oil-globules are occasionally seen within or upon them. The inter-tubular capillaries and the veins present no appearance of thickening. The Author referred to Dr. Reid's observations on the phenomena of asphyxia, and to Dr. Alison's, on the capillary circulation, and its dependence on the vital attraction exerted upon the blood by the processes of nutrition and secretion. The escape of serum from the Malpighian capillaries, and its consequent mixture with the urine, and its serous effusion into the areolar tissue and the serous cavities, result from impeded capillary circulation, consequent on the retention of urinary excrementitious matters in the blood, the obstruction being analogous to that which Dr. Reid proved to exist during the process of asphyxia. The obstruction occurs in the inter-tubular capillaries of the kidney, and is the cause of the remarkable hypertrophy of the Malpighian capillaries, and of the arterial tunics. The obstruction in the systemic capillaries would account for the hypertrophy of the left ventricle of the heart so frequently observed in cases of chronic renal dropsy, without manifest disease of the valves or of the vessels. The Author then referred to some pathological phenomena probably connected with impeded capillary circulation, and in this respect analogous to those before mentioned,—*e.g.*, serous effusion into the pulmonary cells in slow asphyxia; hypertrophy of the right ventricle of the heart in cases of chronic asthma; sudden death from the entrance of air into the veins; and the frequent connexion of cerebral hæmorrhage with renal disease.

Dr. Snow stated, that some time ago he had explained the connexion between congestion of the kidney and albuminous urine in much the same way as the author had done; but he had waited for additional cases, before making his ideas known. He differed a little in opinion, however, from Dr. Johnson, he (Dr. S.) viewing differently the phenomena attending the experiments made by Alison and Reid. He thought that the congestion in the lungs from asphyxia depended not merely on the changes in the blood, but on an arrest of the circulation in the capillaries, the changes that take place in them being necessary to the circulation. He would refer congestion of the kidney to the arrest of the secretion, without waiting for the alteration of the blood, the arrest of the secretion being caused by the desquamation which was going on in the tubuli. The arrest of the secretion is most marked at the onset, when the congestion of the organ is the greatest; whereas, if the latter depended on the alteration in the blood, it ought to be the greatest, as the change in the circulating fluid makes progress. The author had spoken of desquamation in renal disease after scarlatina. He (Dr. Snow) was not sure whether he meant desquamation of the skin, or of the internal tubuli of the kidney. If he referred to the skin, he begged to differ from him, as renal disease was likely to occur, even when there had been no skin affection. He (Dr. Snow) believed that the kidney was affected in the early stage of scarlatina, just as much so as the skin.

Dr. C. J. B. Williams said, that three or four years ago, when the author of the present paper brought before the Society some observations on the same subject, he (Dr. Williams) took occasion to remark, that Dr. Johnson had too little attended to the state of the bloodvessels of the kidneys, which, in Dr. Williams' opinion, were primarily disordered in most cases of Bright's disease. In a subsequent, and in the present communication, that omission had been in some degree rectified; but he (Dr. Williams) still differed from the views of the author as to the explanation of the changes in the vessels which he had described. The view of Dr. Alison, adopted by the author, that the obstruction to the bloodvessels in asphyxia and other morbid states, is due to certain vital attractions and repulsions, he (Dr. Williams) considered to be hypothetical and unnecessary. It assumed the existence of a new class of physical forces, distinct from any hitherto known; and such an assumption was not consistent with philosophy, if the phenomena could be explained on principles already established. This, he thought could be done in the instance of asphyxia, the obstruction in which might be due to the tonic contraction of the small arteries; and his friend, Mr. Erichsen, had inferred this from direct observation. In many microscopic investigations of the circulation in the frog's web, he (Dr. Williams) had ascertained, that the tonic contraction of the small arteries was chiefly concerned in obstructing the flow of blood. On the application of cold, or of an astringent, the small arteries contract almost to obliteration, and the blood stagnates in the capillaries and veins. A momentary contraction follows the application of a very weak stimulant, but this is quickly followed by enlargement of the arteries, which let in a full and rapid current. He did not consider the contraction of the arteries to be the only cause of capillary obstruction, for there were several others that could be specified and explained, but he mentioned it as one that had not been sufficiently understood. He held that various kinds of congestion in the kidneys were adequate to cause albuminous urine, and, if sufficiently intense and prolonged, to induce change of structure also, corresponding with some forms of Bright's disease. Thus he had known the urine become albuminous from the congestion occurring in the cold stage of ague, in the congestive stage of eruptive fevers, and in the paroxysms of dyspnœa and palpitation from organic diseases of the lungs and heart. In the latter cases, if the congestion continued, the urine became permanently albuminous, and contained casts of the uriniferous tubes, composed of granular matter and altered epithelium, and, in proportion as this took place the urine failed in quantity or quality. He had repeatedly examined the kidneys of patients dying at this stage, and found them more or less congested and mottled with pale spots, which, on inspection under the microscope, proved to be the uriniferous tubes gorged with granular cells and matter. These contents presented considerable variety in different cases; in some resembling the natural epithelium of these tubes, but, for the most part, they were less regular in size and shape, and were more like the common granular cell or exudation-corpuscle; and, in cachectic subjects, often presented an abundance of fat globules, like old exudation matter. In fact, he regarded it as exudation matter from distended or congested bloodvessels, taking, on an epithelial surface, more or less of the character of the epithelial cell. The thickening of the bloodvessels, described by Dr. Johnson, he considered part and parcel of the same exudatory process. Although he differed in his mode of explaining them, he felt indebted to the author for these observations, which he took to be confirmatory of his own views as to the nature of Bright's disease and renal dropsy.

Dr. Johnson remarked, that the questions relative to the changes in the blood in these cases are very important, and admit of accurate investigation. The congestion of the kidney must precede the changes in the cells, and the effusion of serum. It may occur in two ways, either in the kidney, or external to it, as in disease of the heart also. In cases where the disease originates in the kidney, the order of the phenomena, he believed, was as he had stated in the paper; first, in the secreting cells, leading to the process of desquamation, which may go on for a time before there be evidence of congestion or the effusion of serum. He believed this state occurred in scarlatina; the difference was merely in degree,—the process, he thought, was the same. If the urine were examined, there would be evidence of desquamation going on, although there would not be found entire epithelial cells. As the disease advanced albumen would appear, and at last the urine would become highly albuminous. He could not tell why it is so, but it is a law that, when the secreting cells are found in the urine, some abnormal substance is passing off in it. He (Dr. Johnson) could not see any difference between the explanation offered by Dr. Snow and his own. We are not acquainted with any facts which will enable us to give a positive explanation of obstruction in the capillaries. He thought Mr. Erichsen's conclusions not warranted by his experiments; he (Mr. E.) attributes the occurrence of asphyxia to spasm of the pulmonary arteries and veins, caused by the presence of black blood, forgetting that it is always circulating through the former. Dr. Reid's objection to Mr. Erichsen's theory he considered to be well based. The old opinion, that asphyxia causes death from the presence of black blood in the cerebral vessels, inducing paralysis, is contradicted by the fact that, if such were the case, it would be impossible to resuscitate the sufferer, as the arterial blood must first pass through the heart and lungs, which could not act. This objection he thought equally applicable to Mr. Erichsen's theory; for, if the circulation were almost arrested, the atmospheric air could not get access to the blood in the arteries. It shows, therefore, that the obstruction must be in the capillaries.

Dr. C. J. B. Williams said, that he did not see any force in Dr. John Reid's objection to Mr. Erichsen's explanation of the capillary obstruction in asphyxia; for a well-known experiment of Goodwin had proved that artificial respiration could oxygenate the blood, not only throughout the lungs, but even in the heart and some of the arteries, *after the heart had ceased to act;* the change being chemical, and transferred from particle to particle independently of motion, although, of course, motion would greatly aid its diffusion.

Mr. Paget inquired of Dr. Johnson, whether he had noticed the condition of the small bloodvessels in other parts of the body as well as in the kidneys? He asked the question, because he had found, that when there was albuminous urine, with enlargement and hypertrophy of the left side of the heart, there was also general arterial enlargement. This had induced him, when lecturing on general pathology, to give the same explanation of dropsy as the author had done. He (Mr. Paget) was not able to say whether the observation applied to the state of the capillaries.

Dr. Johnson had not particularly examined the arteries in other parts of the body under the microscope, but he thought it very probable that such a state existed.

Mr. Solly inquired of Mr. Paget whether the aortic valves were diseased, or there were any obstruction at the commencement of the aorta in the cases he had alluded to?

Mr. Paget had noticed it only in cases of albuminous urine, with diseased kidney, and the condition of heart he had described. He had not seen it when the aortic opening was contracted. The vessels were enlarged and thickened, and sometimes quite tortuous in their course.

Mr. B. B. Cooper would not expect to find hypertrophy of the left ventricle when the calibre of the arteries is enlarged. He thought it singular, that, in the cases under notice, no one had considered that the origin of the disease might be in the blood itself, instead of being in the kidneys or in the blood-vessels. He believed it more frequently depended on deterioration of the blood itself, than on any other cause.

Dr. Johnson had repeatedly, in the paper which had been read, referred to the presence of a poison in the blood, which is conveyed to the kidney during the process of circulation.

Mr. Toynbee inquired if the examination of the blood-vessels had been made on them in the injected state. He had made a series of experiments on injected specimens, and had come to the conclusion, that they were all enlarged. If injected, what was the injected substance?

Dr. Johnson replied, that many of the experiments were made on injected specimens; the injecting material was size, coloured with vermilion or chromate of lead.

Dr. Black thought the author had answered Dr. Williams's theory very fully; but he (Dr. Black) was of opinion, that the objections to Dr. Williams' theory were equally opposed to that advanced by Dr. Johnson himself.

Dr. Copland referred the primary cause, in Bright's disease, to inflammation of the Malpighian

bodies and canals, extending to the secreting surfaces of the organs, from deficiency of nervous power, and consequent deterioration of the blood. By-and-bye, he believed, we shall find the first change to be in the state of the organic nerves supplying the kidneys.

ANNIVERSARY MEETING,

March 1, 1850.

Dr. Addison, President, in the chair.

The Fellows of this Society mustered strong in the Library long before the hour of meeting, it being expected that there would be a determined struggle in opposition to the House-list. At 4 p.m. the room was crowded to excess, every seat occupied, and there was scarcely even standing-room, while the noise and confusion arising from the discussions which were being carried on in every part of the room, rendered it a thorough Babel of sounds, although not of tongues. Soon after four, the President, who was then in the chair, nominated Dr. Black and Mr. Coulson to be the scrutineers of the ballot-papers, which were declared to be receivable till 5 p.m.

While the balloting was going on, the Report of the Auditors was read, from which it appeared, that the total amount received last year was 1224*l.* 8s.; of which, 216*l.* 16s. admission-fees, 25*l.* 4s. composition-fees for the Transactions, 919*l.* 16s. annual subscriptions, 98*l.* 12s. 10d. dividends, 1*l.* 14s. fines, and 35*l.* 2d. 4s. cash received from Longmans, The expenditure amounted to 1289*l.* 1s. 9d., including 140*l.* sub-librarian's salary, 212*l.* 15s. rent, 130*l.* 12s. publishing Transactions, and 213*l.* 15s. 3d. balance due to the Treasurer for the past year. The balance now due is 64*l.* 13s. 9d.

The Report was received, and ordered to be printed and circulated in the usual manner.

The Report of the President and Council was next read, announcing a slight increase in the number of Fellows: there were 578 in the previous year, and they are now 587, there being 26 new Fellows, and 17 retired,—*i. e.*, 30 honorary, (11 British, and 19 foreign,) 308 resident, and 239 non-resident. The Report stated, that, while the amount of the annual subscriptions was larger than on any former occasion, the expenditure had been lessened, more especially as regarded the cost of the Transactions. Two-fifths of the sum thus saved had been expended on improving the Library: 800 works, about 1000 volumes, had been purchased last year, and the library now consisted of nearly 22,000 volumes. The preparation of a catalogue of the library by Mr. Williams, the sub-librarian, was noticed with high commendation as a work of great labour; his energy and zeal were spoken of as worthy every praise. The general index to the Transactions was reported to be nearly ready, and it was hoped that it would be distributed among the Fellows in a short time. It was further announced that the Council had taken a lease of the house, terminable at their option every seven years, at a rental of 160*l.* per annum; they had reserved the right to make any alterations that were necessary in the library. The report concluded by drawing attention to a new bye-law, to be proposed to the meeting, allowing a composition to be paid in lieu of the annual subscription.

This report was also received, and ordered to be printed and circulated among the Fellows.

Dr. Addison, the President, then arose, and delivered the annual address, in the course of which he congratulated the Fellows on the progress made by the Society over which he presided, as evidenced by the reports just read, which, he said, afforded abundant proofs of its prosperity. He called it a Society holding the highest rank among the Medical Societies of the kingdom; a national representation of a noble Profession—a Profession distinguished for its learning, integrity, and disinterestedness. Dr. Addison then spoke of the medical practitioner, his education, alike classical, mathematical, and professional; his career, and the estimation in which he is held; and he dwelt on the necessity for union and harmony among the different members belonging to the Profession. The want of union amongst them inflicted the most deadly injury upon the Profession, paralyzing its powers, allowing it to be humbled, libelled, and lampooned, and permitting the honest practitioner to be plundered by unblushing quackery, and consequently tempting him to forget what is due to the Profession which does not protect him, and to rush blindly into the turbid stream of quackery. He alluded to the reserve that had been shown lately with regard to the production of papers for the society, which had caused regret, but not surprise nor discouragement, as the constant struggle requisite to obtain even a competency, and the increasing occupation of the time of the Fellows by their professional pursuits would fully account for this, without calling into question either their goodwill or their industry. After some further remarks, Dr. Addison terminated an eloquent address by a notice of the Fellows lost to the Society by death during the past year. Among these were Mr. Varicas, Dr. John Somerton, Mr. Goldwyer Andrews, Dr. Wright, Mr. Morton, Sir D. Dickson, Mr. Roche, Dr. Burton, and Mr. Clift. Of the two latter gentlemen he spoke in the highest terms. In his concluding remarks he expressed his regret at the simultaneous retirement of both the Secretaries, which he said could not fail to enhance the difficulties to be experienced by their successors. He regretted their withdrawal, as they were gentlemen of the highest honour, feeling, and independence, and sincerely attached to the real interests of the Society.

The conclusion of Dr. Addison's address, of which we have given a mere sketch, was received with great applause.

Mr. Macilwain then moved the adoption of the new bye-law, which he read. The purpose of it was to enable the Fellows to pay a composition fee, varying in amount according to the date of Fellowship, and calculated by Mr. Neilson, the Actuary, after the rate of fifteen years' purchase for newly-admitted Fellows, with a proportionate reduction for those of longer standing. A clause in the bye-law provided for the investment in the funds of the money thus received. He said, some of the propositions were not so acceptable, perhaps, as in the propositions originally before the Council. The amount to be paid as a composition had been ascertained by an Actuary, up to the period of thirty years' Fellowship. After that date, it had been intended that all future payments should cease. This was Dr. Baly's proposition, but it was objected to by the treasurer, who thought it would scarcely be safe in relation to the funds of the Society. He (the Treasurer) had therefore proposed that the scale of calculation should be carried on, and that Fellows of thirty years' standing might compound for all future payments by one of 5*l.* 5s. Mr. Le Gros Clark had proposed in the Council that the entrance fee (6*l.* 6s.) should be reduced one-half; but it could not then be carried out, and he (Mr. Macilwain) thought that the Council had displayed a wise caution in acting on the suggestion of the Treasurer, so as not to impair their funds. He had great faith in the efficiency of this and of other liberal measures, and did not entertain any fear that their funds would suffer. He was of opinion that when a member had paid the subscription for thirty years, coupled with the fact, that after so long a practice he must have attained a certain degree of eminence in the Profession, and that the measure would have the effect of retaining the older members in the Society, it would be good policy to free them from future payments, and he believed that, if it were found it could be done without injuring the funds, that part of the bye laws would ere long be withdrawn.

Dr. Gregory, as a member of the Council and one of the Sub-Committee, on whose report the bye-law was founded, seconded the proposition. He had been for many years past convinced of the advantages that would attend the adoption of a fixed payment, instead of an annual subscription, as many persons could not always continue to pay the annual fee. He (Dr. Gregory) believed the measure before them was as perfect as it could be made; it was based on the calculations of an eminent actuary, and the most minute details had been entered into, in ascertaining the various sums which represented the respective dates of fellowship.

Dr. Webster said, that the principle of the new bye-law was good; it was one he had contended for when in the Council; but its application was too stringent; it was not sufficiently liberal. If it were made more liberal, he (Dr. Webster) was convinced the Society would gain materially, instead of losing. The amount to be paid by a new Fellow, compounding, would be 50*l.* 8s. The annual subscription is 3*l.* 3s. Now, the interest of 50*l.* 8s. alone would be 2*l.*; evidently, therefore, the composition is too large at commencement. He would not be led away by any actuary, however experienced. In the Royal Society they only require fifteen years' purchase from those who have not contributed any papers; those who have, pay only ten years. In this Society there is no distinction made, as regards the payments, between those who have laboured for the Society, and those who have not. A Fellow of the Society, who has belonged to it for thirty years, will have paid 97*l.* 13s. Now, after paying so large a sum, it is too much to be called upon for 5*l.* 5s. more. After thirty years' fellowship, he should be altogether free. He, (Dr. Webster,) at the anniversary meeting last year, had mentioned several points in which he objected to the house list. It contained twelve contributors and nine non-contributors; in the list now before the Society, although there are some improvements in having fewer junior Fellows, and not so many from particular schools to the exclusion of others, there are only nine contributors, and twelve who have never published a paper in the Transactions. This he thought a matter of great importance. Twelve of them have been previously, one, for five years; three, for six years; and one, for nine years, on the Council; although the last-named was elected so late as 1837; whilst among the eleven new Fellows now recommended as officers, or for seats in the Council, seven have been formerly in office,—two only, however, being contributors. Not one of the four whose names are now proposed for the first time, have published any paper in their Transactions; and some of the Councillors have not even taken part in the discussions. He (Dr. Webster) thought it very desirable, that those who have contributed to the Transactions, or have taken a part in the discussions, which are duly and very faithfully reported in the Medical journals, should have a seat at the Council-table. There are eighty-five Fellows who have written one or more papers; of these, forty-five, or more than half, have never filled any office whatever in the Society; whilst the remaining 40 have all been on the Council, some three times, some four, and three have actually served on the Council on five several occasions. With regard to the whole 308 resident Fellows, it appears, that upwards of two-thirds, or 220, have never once occupied seats in the Council; while, on the other hand, the governing body has always been selected from among 88 Fellows, being less than one-third the whole number of resident Fellows. He mentioned this fact, to show the system which had hitherto been pursued, and he had no doubt but that it would be changed in future. He thought that those who laboured in their vineyard, should be encouraged; and added, that the late Dr. Clendinning, who was at one time one of their Secretaries, agreed with him in the opinion, that contributors to their Transactions had a claim to a seat in the Council. This his proposition was quite in accordance with the standing orders of the Society. (Dr. Webster here read portions of the bye-laws to prove his assertion.) There is another bye-law, that the names of at least twenty of the senior Fellows who have never been in office, nor on the Council, should be read over, before the House-list is prepared. Had this rule been carried out, it never could have happened that two-thirds of the Fellows should be debarred from office. After the election of the Council at the anniversary meeting last year, a vacancy occurred, which was filled up, not from among the 220 resident Fellows already spoken of, nor even from among the 45 contributors, but from the Committee of Referees, and the gentleman elected had formerly been on the Council. A similar thing occurred this year when another vacancy happened in the Council. The gentleman who was elected, was certainly very distinguished, and one who has always done his duty; but he (Dr. Webster) did not think such a mode of selection fair, nor encouraging to the other Fellows of the Society. He was opposed to such a proceeding; he was, indeed, a great enemy to all House-lists; it resembled too closely the appointing one's own successors.

Dr. Addison here reminded Dr. Webster, that it was perfectly competent for him to have a General Meeting called to discuss the question, on the requisition of three Fellows.

Dr. Webster was aware of that, but he did not wish to be an agitator. He desired merely to express his opinion. With respect to the Committee of referees, seven had never been on the Council before, and nine are junior fellows elected in or since 1840. Eight or one-third are non-contributors; and two last year furnished a joint essay, and those he did not know how he should class, whether among the contributors or not.

It was then announced, that the ballot had terminated in favour of the house-list. 157 Fellows had voted—82 in favour of the house list; 75 against it: majority, 7.

Mr. Phillips explained, that the composition-fee had been fixed at fifteen years' purchase, not arbitrarily, but, after the calculations of a celebrated actuary, who had ascertained that that period represented the average duration of Fellowship, and, consequently, it would not be safe to take a less period. If a more liberal measure than that proposed for the thirty years' fellowship were adopted, the funds would be endangered. It might happen that twenty-eight persons might cease to pay their subscriptions, causing a loss of 88*l*. By the proposed bye-law, under these circumstances, they would receive 147*l*., the interest of which would not be more than 4*l*.; so that there would be an absolute loss of income, amounting to 84*l*. He doubted whether the Society would be able to bear a greater loss. It must be borne in mind, that every year more members would be approaching their thirtieth year; and that every year that would add to the declension of their funds. The Council had, therefore, determined that it would be unwise to go further at present; perhaps subsequent experience might enable them to act more liberally hereafter. There was this difference between this Society and the Royal; men enter the latter at a later period of life; this at an earlier; the duration of the fellowship is consequently less in the Royal Society.

Dr. Webster remarked, that he disapproved of secret reports being made on the papers sent to the Society. Some reason should be alleged for the rejection of papers from the Transactions. This was done in the National Academy of Medicine. The names of the reporters there are known, and they are obliged to defend their reports publicly. He thought that every Fellow had a right to see every public document belonging to the Corporation. That is, corporation-law. At the Royal Society, every Fellow was entitled to see the Minutes of the Council, and every document belonging to the Society. Many of the reports which had been made were very valuable, and very creditable to the referees: they might be published with advantage. There was great dissatisfaction respecting the smallness of the last volume: thirty-two papers had been read: of these, nineteen were rejected, and only thirteen published. The causes which led to this should be made known. He would suggest, that when papers were not of sufficient importance to warrant their publication *in extenso*, they should be given in abstract, and published in the form of proceedings at the end of the volume. This would act as an inducement to their authors to continue their exertions, and lead them to furnish other papers which might be worthy of appearing in the Transactions. He threw this out as a suggestion, and trusted the Council would take it into consideration. It was far better, at all events, than publishing a list of donations of books in large type.

Dr. Moore thought there was a fallacy in the calculations of the Actuary, who had apparently made his estimation for the composition-fee, as if he had been arranging for the purchase of an annuity.

The Secretary, in explanation, read an extract from the report of the Actuary, showing the data on which the proposition had been based.

Dr. Moore considered that the calculation was throughout fallacious; it was, however, too difficult a matter to go into then. He approved of the principle of the bye-law, but not of the calculations on which the respective sums to be paid were proportioned.

Mr. Quain objected to the funding the money received as composition fees: it ought to be spent for the benefit of the existing Fellows. He would rather the Society possessed 1,000*l*.'s worth of books than the same amount in the funds.

Mr. Macilwain said the Council had taken this point carefully into consideration, and had come unanimously to the decision that it would be better to fund it. He then commented on the observations made by Dr. Webster, and said that some of the bye-laws rendered it impossible to remedy the objections he had raised, of which, however, he fully approved. He next alluded to certain reports current, and stated that the Council were unanimous in their regret at the resignation of the Secretaries.

Mr. O'Connor observed, that there was only one General Practitioner on the Council, and remarked that this had been the case for some time past.

The new bye-law was then adopted; after which, on the proposition of Dr. Copland, a vote of thanks was given to Dr. Addison by acclamation, for his services as President during the past year.

Dr. Addison briefly returned thanks, and the meeting then adjourned.

The following is the house-list:—President, Dr. Addison. Vice-Presidents, Dr. Burrows, F.R.S.; Dr. John Thomson, Mr. Alexander, F.R.S.; Mr. Solly, F.R.S. Treasurers, Dr. Todd, F.R.S.; Mr. Phillips, F.R.S. Secretaries, Dr. Seth Thompson, Mr. Charles Hawkins. Librarians, Dr. Hennen, Mr. Dixon. Other Members of Council, Dr. Cursham, Dr. Gregory, Dr. Macintyre, Dr. Sutherland, F.R.S.; Dr. C. J. B. Williams, F.R.S.; Mr. Clayton, Mr. Curling, Mr. Fergusson, F.R.S.; Mr. Henry Charles Johnson, Mr. Lane.

CORRESPONDENCE.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

[To the Editor of the Medical Times.]

SIR,—I have to thank you for a copy, in a separate form, which I, in common with others, received on Friday morning, of your Leading Article, respecting the affairs and the then pending election of officers in the above-named Society. Discussion will do good in this as in every other case, provided it be conducted in a fair spirit; and, as I have no doubt whatever that, on your part, the discussion will not intentionally be otherwise than entirely fair, I send you this letter, in the hope that my observations may contribute to elucidate the subject.

And, first, I must express my hearty concurrence in a great part of your views. I look upon the refusal to publish a paper of first-rate merit as a great evil,—an evil, however, mainly as regards the character of the Society; for, thanks to you, we have the Paper in full possession. Yet, while I fully admit that the refusal to publish a most valuable contribution to a department of medicine still but little *really* understood, and one most difficult of cultivation, was, to say the least, a vital *mistake*; I must at the same time express the opinion, (though it be little calculated to diminish our reprehension of the act justly complained of,) that the Essay in question was in some degree calculated, as I read the present tastes and feelings of the Profession, to challenge opposition from a body of medical men, even the councillors of a Medical Society. If the Essay concerned a point of animal chemistry, telling for or against the theories of Liebig, or if it were occupied with some more or less accurate microscopical observations,—for example, a newly-found turn or point of thickening in a blood-vessel, or a new tail to a nucleated cell, or a new mote in some evacuation; nay, possibly, in the eye of the observer,—if Dr. Taylor, instead of working sedulously for long days and years by the bedside of the sick, had spent a little time in seeking out and finding, as he must find, some of these or such objects, there were a matter which would fix all attention, which, without exciting any prejudice, would chime in with most men's prepossessions, for "*omne ignotum pro magnifico*," and the thing would be published at once by any Medical Society, and this the more readily if some leading members of the Profession, quite accidentally present, should kindly "swell the note of praise" at the Society's meeting. But, that "practical men," "men of experience, who, over and over again, had cured the same disease," who, perchance, had even "lectured," or "written a practical work," or both, upon that very disease,—that such men should now be told how to treat the disease,—told that hitherto they had been doing somewhat wrong in their management of it, and told so, not by a leading physician in a metropolis—not even by a Frenchman or a German, but by a man in Huddersfield; that this should be suffered to pass without opposition by any Association of Medical men would scarcely be expected by lookers-on who know anything of human nature—of medical human nature. With these views I do not feel much surprised by the refusal of such a paper by our Council; and I do not know how a Society shall construct a Council that shall be free from such influences as I have adverted to.

But I regard the matter as being, in the present case, of more importance to the Society than to the Author. To him, and to such as he is, I would say, persevere in your valuable and honourable labours. When you add to our store of knowledge facts which are useful to humanity, you must know it, and, knowing it, may rest satisfied, that, whatever may be done after dinner, by more or less learned Doctors, while they sip their Medico-Chirurgical coffee, your useful work will be acknowledged, in time and for time, without stint and without limitation; and that, too, whether published in that book or in this.

And now, Sir, for the "Balloting-list." Is it to be supposed, that the changes which have been suggested to us in the "amended" list, would have cured any evil existing, or supposed to exist, in the Society. I really saw no very strong reason to answer this question in the affirmative, and I therefore proceeded to satisfy myself whether I should best perform the duty I conceive myself to owe to my brother Fellows in the Society, by adopting the Council's list or the "amended" one. According as well to the laws of the Society as to my notions of what is just, seniority must be taken into account, with other claims, in determining as to the members who are to be placed in the most conspicuous positions amongst us; and I therefore took down the last volume of the "Transactions," to examine the list of Fellows which it contains, with the date of their admission into the Society. The names of the Fellows suggested to us for election anonymously with those proposed by the Council; and the year of election, in each case, are as follow:—

1844. Dr. Bashan.	1839. Dr. Seth Thomson.
1842. Mr. Erichsen.	1838. Mr. C. Hawkins.
1843. Mr. Hewett.	1837. Mr. H. C. Johnson.
1843. Mr. Toynbee.	1840. Mr. Lane.

Thus we were invited to alter the Council's list by inserting the names of four Fellows who happen to be from three to six years junior in the Society to those recommended by the Council.

But, supposing it had been considered desirable to change the Council's list, had no Fellows joined the Society in those six years? My search was very short; still I found the following:—

1837.	1841.
A. M'Whinnie.	John Avery,
1838.	William Bowman,
H. Hancock.	Holmes Coote,
1839.	M.A.N. Crawford, M.D.,
T. Graham Balfour,	Campbell de Morgan,
T. H. Burgess, M.D.	John Hilton,
1840.	James Ranald Martin,
Thomas Tatum.	E. W. Murphy, M.D.,
	H. Pitman, M.D.

All these names occur, with many others, before I approach the years to which belong the names of the Fellows whom we were called on to support in opposition to the recommendation of the Council; and yet gentlemen who speak about the impropriety of "passing over" certain Fellows, supported the "amended" list, which leaped more nimbly over the Fellows than ever had been done before in my experience. Let the Fellows look to the names carefully, and, if I mistake not, they will not readily find a good reason for putting some of them aside.

In truth, the proceeding on this occasion is but a type of what would constantly be done if, instead of the responsible Council whom we can blame for its acts, we were committed to private organization of persons in the Society as we should be if the influence of the Council were abolished. I am, Sir,

Your obedient Servant,
MEDICO-CHIRURGUS.

ABERDEEN DEGREES.

[To the Editor of the Medical Times.]

SIR,—In your last Number, you mentioned the existence of a controversy between the two Colleges of Aberdeen, respecting the right of Marischal College to grant any other degree than in Arts. It ap-

pears that it has been accustomed to confer degrees in the other Faculties also,—a privilege which is now disputed by its senior rival, King's College, founded by a Papal Bull a century previous to the foundation of Marischal College, by a Scottish nobleman, confirmed by Royal Charter, and an Act of the Scottish Parliament. The question might probably be settled at once, by taking the opinion of an English lawyer, if the dictum of an eminent Chancery barrister is correct, that *custom* is quite enough to give the right to any University to confer degrees. Sometime in 1832 or 1833, when in Rome, I happened to mention to the lawyer in question that the right of the English Universities to confer degrees had been disputed in a late Number of the *Edinburgh Review*, when he replied, that "*mos pro lege*" gave sufficient authority. I have the honour to be, Sir,

Your humble Servant,
MEDICUS EDINBURGENSIS.

Edinburgh, Feb. 27, 1850.

THE MEMBERS OF THE COLLEGE OF SURGEONS OF ENGLAND.

[To the Editor of the Medical Times.]

SIR,—The late Sir Astley Paston Cooper, Bart., and the late Sir Charles Bell, Bart., considered the Members of the College of Surgeons *of their day*, sufficiently educated for operating surgeons, and displayed their liberality and good feeling towards the Members generally, by regretting that certain members who practised Midwifery had not been elected Examiners and Councillors of the College.

Since the decease of those Baronets, the Council have degraded the members, by having (in 1839) lowered the standard of qualification for membership. The present Council *now* consider the members of the College to be inefficiently educated, look scornfully upon them, and repudiate them as operating Surgeons or Councillors.

When the Council lowered the standard of qualification for membership, what object had they in view.

Without waiting for an answer to the question, may we not say, that if the existing members of the College of Surgeons cannot, or will not, establish a new "College of General Practitioners" for the purpose of raising the standard of education of their own race of Medical men, they must be content with their present state of degradation? Must they not either act with determination now, or for life remain dormant?

I am, Sir, yours faithfully,
A MEMBER OF THE COLLEGE.

East Retford, Feb. 20th, 1850.

THE *ED NAMES IN THE "MEDICAL DIRECTORY."

[To the Editor of the Medical Times.]

SIR,—A correspondent in your number for Feb. 23, who signs himself "One of the *ed," complains of these *distinguishing* notes being affixed to the names of parties who either have no degree whatever, and therefore have no claim to practice, or in any way to be tolerated or otherwise, who presume to refuse to send a notice of their qualification to the worthy Editor of a work, a desideratum in the Profession, viz., a true register of Medical Men as distinguished from quacks and impostors. It is really a heartless state of things that such improper persons should be allowed even a *distinguished* place in the register, and I think a fund might be raised to annihilate from the Profession such undue and unfair competition. Medical Men suffer from this competition, and the Apothecaries' Company are to blame for it. That Company was and is the only one which could have prevented such a state of things, and from culpable indolence, from a greed for gain, a desire to keep all the money they could lay their hands on—from these low motives they have allowed such a crop of weeds to spring up in the Profession, that they now occupy such a portion of the professional ground as to make it almost an impossibility to eradicate them. A ten or twenty years' crop is now sown, and it will increase unless all fresh seed is carefully destroyed. Under the letters A and B in the Directory, there are upwards of one hundred distinguished or *ed names. How many must there be when you take all the letters of the alphabet? There is a just retribution going on, an inevitable good springing from so much evil permitted by the Apothecaries' Company. The Profession is about to cast off the Company, as a slough, a morally degraded body unworthy of further confidence. By this time they might have held the highest and most honourable position in the Profession, but what is their present condition? They are only able to exist by threats to men who have degrees as good, if not better, than their own. A like retribution awaits the Royal College of Surgeons. Who are the Council of that College that they dare to insult the members? Is there one of them equal to any of the great names, living or dead, in the department of Midwifery? Can any of them bear such a comparison; and there are a host of members, general practitioners, as well educated, aye! better, and as worthy members of society as any of the Council are. Then, how dare they presume to insult the members? You can only account for it, by their being men of low origin; for it always comes to pass, that low men make bad governors, bad masters, and presumptuous public characters. If they, in such bad taste, will arrogate to themselves what they don't possess, viz., classical knowledge and mental superiority, let us examine them. I dare say, some will be found almost incapable of going beyond their routine business, and some there are, who, if you ask a question, will not exactly say, for shame sake, that the knowledge they are tested upon is out of their line. I remember once asking a railway contractor something about some nautical business; and he answered, such information is not in my line. Now, I dare say, that some of the most obstreperous of the Council would only be able to put an intelligent person off by a similar answer. Then, how do they dare, I ask again, to insult the members? Ignorance and presumption is at the bottom of this matter; let them see to their arrogance before they are whipped out of existence, and then the misery will be, that they will drag the College with them; for even in the downfall of the lowest scamp, some one or other suffers. Alas! for our College, with a presumptuous Council.

(Signed) A MEMBER OF THE COLLEGE OF 1838. ONE DECEIVED BY THE COUNCIL, AND WHO DESPISES THEM AS IMBECILES.

CAUSTIC IN STRICTURE.

[To the Editor of the Medical Times.]

SIR,—I must again call upon you, as an impartial journalist, to insert, in the next Number of the *Medical Times*, this my second contradiction of the assertion contained in your report of a recent discussion at the Westminster Medical Society, to the effect, that Mr. Wade was the first person who applied the potassa fusa to impermeable strictures of the urethra. Your plea, that, as Sir B. Brodie did not make use of the words attributed to him, there is no occasion to publish my former letter, is of no avail in the face of the explanation you this day give in your Journal of the many errors committed by your reporter, inasmuch as you therein state, that the speech purporting to be made by Sir B. Brodie formed part of that made by a previous speaker—Mr. Childs. Now, as the statement is equally erroneous, I am fairly entitled (as it has appeared in your Journal) to call upon you to correct it—no matter whether the words were or were not used by either of the above-mentioned gentlemen, or are a pure fabrication of your reporter.

Under these circumstances, I repeat the statement which I gave you in my former letter, namely,—that I first commenced using the potassa fusa in my treatment of both *permeable and impermeable* strictures of the urethra in 1833;—that, however, I claim no personal merit to myself in the matter, (if it be thought that any be due,) as all the knowledge I possessed on the subject, at that time, was derived from the experience of my late father, who had so employed it for more than twenty years before this time. I further called to your notice the fact, that I published the first edition of my work on the Treatment of Strictures of the Urethra with the Potassa Fusa many years before the publication of Mr. Wade's book on the same subject. And, lastly, I took the opportunity of calling the attention of the Profession to the disingenuous manner (as I think) in which Mr. Wade has throughout behaved, both towards them and toward myself; inasmuch as, although he could scarcely be ignorant that I had, for many years before the publication of his work, been in the habit of treating strictures with the potassa fusa, and had published a Treatise on the subject, he not only never incidentally mentioned those facts in his work, but, on the contrary, he so worded his remarks, that the natural conclusion which any person ignorant of the matter would have arrived at was, that since the time of Mr. Wheatley, the remedy had been certainly overlooked, and that to himself solely belonged the credit of first recalling the attention of surgeons of the present day to its value. Nor has he, at any of the recent discussions in which this merit has been directly or indirectly assigned to him, been induced, either by a sense of fairness or modesty, or by a feeling of pity for the ignorance displayed by the speakers—as far, at least, as this matter is concerned—to disclaim, in the slightest measure, their unmerited praise.

However, should it turn out that Mr. Wade was—improbable as it appears—ignorant of the facts which I have above related, I trust that his future conduct will place the matter beyond all doubt.

I observe that you prefix the title of "Dr." to my name, I therefore beg to subscribe myself,

Yours obediently,
F. B. COURTENAY,
Member of the Royal College of Surgeons of England.

2, Chandos-street, Cavendish-square,
March 2, 1850.

COLLEGE OF PHYSICIANS.

[To the Editor of the Medical Times.]

SIR,—Your constant well-known efforts in the cause of justice assures me, that you will insert this short letter on a notorious professional grievance, in your truly respectable Periodical. Dr. Storrar is reported to have said, publicly, that the Royal College of Physicians will license men (numbers of whom are practising as M.D.'s in London, as that sure guide, the *Medical Directory*, will show,) who possess merely a purchased trumpery German degree; but, the Doctor has only told us a *part* of the *truth*. He omitted to observe, that the said College elects, as Fellows, young men who have no degree at all! passing by numberless gentlemen who have *real* degrees, obtained after long study, and from acknowledged Universities,—gentlemen of unblemished character, of great experience, and against whom nothing can be said, professionally or otherwise; while the very young Fellows, just alluded to, call themselves Doctors, who are not so well authorised to do so as the German gentry; *seeing that* the College of Physicians has no right whatever to grant degrees. All this is as well known as possible, as the first Medical man whom you may see will tell you; and he will then ask you the commonly mooted question, if it be strange that a strong feeling of dislike should prevail among those, who would be staunch friends of the College, were they treated *with common justice and common decency*.

I am, Sir, your constant reader and friend,
MEDICUS.

London, March 4th, 1850.

MEETING OF LONDON GRADUATES.

[To the Editor of the Medical Times.]

The *Times* newspaper of the 27th ult., contained a letter signed by "A Fellow of the Royal College of Physicians," animadverting on a speech I made at a General Meeting of the Graduates of the University of London. As the *Times* report, which called forth this letter, was ridiculously incorrect, it was not to be expected that the "Fellow's" letter could be applicable to what I really did state, and I, therefore, sent the following letter to the *Times*.

The Editor has not chosen to insert it; and, as I am reluctant to rest quiet under the misrepresentation, I shall feel greatly obliged by your giving it a place in your columns.

I am, Sir, your obedient servant,
JOHN STORRAR.

37, Brook-street, Grosvenor-square,
6th March, 1850.

"37, Brook-street, Grosvenor-square,
"Feb. 28, 1850.

"SIR,—In reply to the letter of 'A Fellow of the Royal College of Physicians,' in reference to what I am represented to have said at a General Meeting of the Graduates of the University of London, permit me to state the substance of what I did say.

"It was, that a large number of Practitioners in Medicine called themselves doctors, and affixed M.D. to their names; but that, comparatively few had had their degrees conferred upon them after a satisfactory examination: and, also, that a considerable proportion got their degrees from Germany, without their having passed any examination whatever. I added, that the College of Physicians had, of late years, adopted a system of granting licenses to applicants who had no degrees, and of countenancing the assumption by such Licentiates of the University designation of Doctor, or M.D., a title to which they had no just claim. My remarks bore simply on the question of University titles and their influence on the public,

who little dream of the manner in which they are often obtained.

"Whatever may be the opinion of your Correspondent on the system now practised by the College of Physicians, it is well known to he condemned by many in the College, as well as out of it.

"Your Correspondent will also please to remember, that the College fell upon this expedient at a time when the establishment of the University of London held out the prospect of an honourable degree to every Student of Medicine who might choose to face a stringent examination. I am, Sir,

"Your obedient Servant,

"JOHN STORRAR, M.D., London.

"To the Editor of the *Times*."

[We are surprised our Contemporary should have refused insertion to Dr. Storrar's temperate letter. We concur in every word of that letter. The College of Physicians ought, if they have not lost all sense of propriety, to discourage, by every means in their power, instead of countenancing, the assumption of the designation of Doctor by such of their Licentiates as do not possess a degree. Nor ought they to recognize degrees obtained at Universities not requiring residence of their Graduates. For our parts, we feel it cannot be too strongly impressed on the minds of all interested,—and who is not, in the question of Medical Reform?—that a degree is an honorary title, intended to indicate, that its possessor has enjoyed that liberal education which collegiate study can alone secure; that a license to practise medicine signifies that the licentiate is qualified, by his knowledge of the healing art, to be entrusted with the health of the community. The Apothecaries' Society gives a license to practise; the College of Physicians to teach as well as practise Medicine. Universities alone grant degrees.—ED. *Med. Times.*]

HANWELL LUNATIC ASYLUM.

[To the Editor of the Medical Times.]

SIR,—I beg to contradict, in the most positive manner possible, the assertion made in your Journal on Saturday last, by a Writer, who signs himself "A Physican and resident Proprietor." The Writer asserts, that he saw three or four patients in restraint here, on his visiting the Institution about three years ago, in company with a friend. This assertion is totally untrue; for no patient has been in restraint of any kind whatever, in this Asylum, for now upwards of ten years. Patients in the habit of tearing their clothes, or of taking off their clothes, wear over their ordinary clothing a dress somewhat like a smock-frock, made of strong linen, which they cannot tear. This dress, to prevent the patient from taking it off, and destroying the clothing under it, is fastened by a belt round the waist, and also by a belt round each wrist. These three belts are not connected with each other, but are perfectly distinct from each other. They are so secured, that they cannot be undone by the patient; but they do not confine the hands, as alleged, nor do they restrain any limb, not even a finger. If your Correspondent, and the gentleman who accompanied him to the Asylum on the occasion he refers to, would favour me with a visit, I think I could convince him, that his statement in the *Medical Times* of Saturday last, was the result of an erroneous impression made upon him by seeing, but not examining the dress in question.

I am, Sir, your very obedient servant,

W. C. BEGBY,
Resident Medical Officer, Male Department of the Asylum.

Hanwell, March 6, 1850.

THE ARTIFICIAL TYMPANUM.

[To the Editor of the Medical Times.]

SIR,—In reference to a note from Mr. Toynbee, published in your last Number, I beg to say that, in applying the hydrated cotton, it must *not be passed through the perforation*, and, if this be done, not only no benefit will be received, but risk of inflammation will be incurred thereby. As I have said elsewhere, it is an operation requiring great tact, and no mere verbal description will teach it to others. It is to be regretted that gentlemen should venture opinions upon subjects with which they show themselves to be so entirely unacquainted. It was the feeling that it would be impossible to convey to others, in words, such explicit directions as would enable them to manipulate with any certainty of success, which withheld me for so many years from the publication of the fact. Recent experience teaches me that my anticipations were well-founded. As you have been kind enough to say that a paper, which I forwarded to you several weeks ago, shall appear in your next (the present) Number, I beg to direct the attention of your readers to what is therein said upon the subject. I am, Sir,

Your obedient Servant,
J. YEARSLEY.

15, Saville-row, March 6, 1850.

THE LISTON TESTIMONIAL.—The Committee for erecting a memorial to the late Mr. Liston having received only 750*l.* towards that object—a sum insufficient for the erection of a statue—have decided on having four marble busts executed, and to present one to the Royal College of Surgeons, another to the University College, a third to the Royal Infirmary at Edinburgh, and a fourth to be presented to the family of the deceased. The Committee to carry out the above intention to consist of the Dukes of Beaufort and Buccleugh, the Marquess of Anglesey, Lord Kinnaird, and Count D'Orsay.

HEALTH OF LONDON DURING THE WEEK ENDING MARCH 2.

The deaths in the past week were only 896, a result which indicates a low rate of mortality at the present time as compared with this season in former years. During the last month, the numbers returned weekly have been 1094, 957, 938, 911, and 896, exhibiting a continuous decline. In the week corresponding to last, of the years 1840-9, they were never lower than 916, in seven of the ten weeks they ranged above 1000, and last year when cholera was approaching and various epidemics were rife, rose to 1138. The average of the ten corresponding weeks is 1043, which corrected for increase of population becomes 1138; the present decrease on this estimate is therefore 242. In the eight principal epidemics, with the exception of diarrhœa, there is now a marked decrease; diarrhœa was fatal to 18 persons, (two-thirds of whom were children,) which differs little from the number of the same week of the last two years, but is more than the average of the corresponding ten weeks. At 3, Elliott's-row, London-road, the son of a painter and glazier, aged 8 years, died of "English cholera," after seventeen hours' illness. On the 24th of February, at 7, Albert-street, the daughter of a gunsmith, aged four years, died from "hydrophobia, caused by the bite of a rabid dog on the 15th of November last," according to the verdict of a jury. Last week consumption was fatal to 93 persons; there died on an average in former periods 136. Under other diseases of the respiratory organs, exclusive of hooping-cough, the aggregate is 176 deaths; formerly at this season they have varied from 160 to 259.

The deaths in the several hospitals of London occurred as follow:—

GENERAL.		Otto-house (Fulham)	0
St. George	7	Blacklands-house	0
Westminster	2	Northumberland-house	0
Charing-cross	1	Whitmore House	0
Middlesex	3	Pembroke House	0
University College	6	St Luke	0
Royal Free Hospital	0	Miles'	1
King's College	3	Warburton's	3
St. Bartholomew	2	Lunatic Asylum, Bow	3
London	0	Bethlem	0
Guy's	3	Lunatic Asylum, Brixton	0
St. Thomas	6	Retreat, Clapham	0
FOR CONVICTS.		New County, Wandsworth	1
Hospital Ship, Unité	0	Peckham House	0
Penitentiary Hospital, Millbank	0	Camberwell House	0
MILITARY AND NAVAL		LYING-IN.	
Royal Hospital, Chelsea (South)	1	Queen Charlotte's	0
Royal Hospital, Greenwich (East)	5	British	0
Royal Military Asylum	1	City of London	0
Coldstream Guards Hos.	0	Hospital, York road, Waterloo 2nd part	0
Grenadier Guards' Hospital	1	FOR PARTICULAR CLASSES.	
Scots Fusilier Guards	0	Female Servant Invalid Asy., Stoke Newington	0
Royal Ordnance	0	German Hospital	0
Dreadnought Ship	3	French Hospital	0
LUNATIC.		Portuguese Jews' Hospital	0
Kensington House	1	German Jews' Hospital	0
Munster-house (Fulham)	0	FOR SPECIAL DISEASES.	
Normand-house (Fulham)	0	Small Pox	3
Sussex & Brandenburgh-house (Fulham)	0	Fever Hospital	0
		Lock	0
		Consumption, Brompton	0

TOTAL, 57.

MORTALITY TABLE.

Deaths in the Week ending Saturday, March 2, 1850.
(Metropolis.)

CAUSES OF DEATH.	Total.	Average of Ten Weeks.
ALL CAUSES	896	1042
SPECIFIED CAUSES	892	1034
Zymotic (or Epidemic, Endemic, and Contagious) Diseases	153	192
SPORADIC DISEASES:		
Dropsy, Cancer and other Diseases of uncertain or variable seat	48	60
Tubercular Diseases	142	182
Diseases of the brain, Spinal Marrow, Nerves, and Senses	122	120
Diseases of the Heart and Blood-vessels	28	31
Diseases of the Lungs, and of the other Organs of Respiration	176	195
Diseases of the Stomach, Liver, and other Organs of Digestion	60	62
Diseases of the Kidneys, &c.	10	8
Childbirth, Diseases of the Uterus, &c.	11	10
Rheumatism, Diseases of the Bones, Joints &c.	6	8
Diseases of the Skin, Cellular Tissue, &c.	1	1
Malformations	5	2
Premature Birth and Debility	28	23
Atrophy	26	14
Age	45	74
Sudden	11	13
Violence, Privation, Cold, and Intemperance	21	25
Causes not Specified	4	7

The following is the number of Deaths occurring from some of the more important special causes:—

Apoplexy	34	Heart	26	Phthisis	93
Bronchitis	76	Hooping-cough	27	Pneumonia	65
Cholera	1	Hydrocephalus	30	Scarlatina	21
Childbirth	4	Influenza	...	Small-pox	10
Convulsions	34	Liver	9	Stomach	6
Diarrhœa	18	Lungs	9	Teething	14
Dropsy	17	Measles	13	Typhus	26
Erysipelas	9	Paralysis	23	Uterus	6

BIRTHS AND DEATHS.

	Births.	Deaths.	Births over Deaths.
Males	813	460	353
Females	761	436	325
Total	1574	896	678

METEOROLOGY OF THE WEEK.

Day.	Mean of Barometer.	Mean Thermometer. Dry.	Ditto. Dew Point.	Difference between the Mean Temperature of the day and the same day on an average of 7 years.	General Direction of Wind. A.M. Calm.	General Direction of Wind. P.M. Calm.	Rain in Inches.	Amount of Horizontal Movement of the Air.	Electricity.*
Sunday	30·188	40·0	33·2	+ 0·1	Calm.	P.M. Calm.	0·00	Miles. 0	Nothing shown.
Monday	30·202	42·5	38·2	+ 2·4	Calm.	E.	0·00	10	P. and tension moderate between noon & 8 p.m.
Tuesday	30·260	44·3	37·1	+ 4·6	Calm.	S.W.	0·00	25	P. and tension strong between noon and 3 p.m.
Wednesday	30·124	41·7	36·9	+ 3·5	S.W.	S.E.	0·00	85	P. and tension variable throughout the day.
Thursday	30·054	37·4	36·6	+ 2·1	S.E.	E. to N. to S.	0·00	30	P. and tension strong from noon.
Friday	30·188	45·7	40·9	+ 6·3	N. & W.	S.W.	0·00	105	P. and tension variable during the morning.
Saturday	30·097	47·7	45·1	+ 8·4	S.W.	S.W.	0·00	190	Nothing shown.
Means	30·158	42·8	38·8	+ 3·3	Variable.		SUM 0·00	SUM 595	

* In this Column, A. stands for Active; N. for Negative; and P. for Positive.

MEDICAL NEWS.

APOTHECARIES' HALL.—Names of gentlemen who passed their examination in the science and practice of Medicine, and received certificates to practise, on Thursday, 28th February, 1850 :—William Foot Vidal, Aveley, Essex; John Page Cooper, London; John Wellington Clements, Pocklington; Charles Nelson Wilkinson, R.N., South Lambeth; Alfred Whittle, Liverpool; James Samuel Seyer Lang, Yatton, Somerset; Edmund Grosvenor Goulden, Hazelgrove, Cheshire; George Charles Armstrong, Ware, Herts.

ROYAL COLLEGE OF SURGEONS.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College, at the meeting of the Court of Examiners, on the 1st instant:—Messrs. Edmund Brown, Sloane-square, Chelsea; John James Ridge, Gravesend, Kent; Hugh Henshall Broughton, Preston, Lancashire; Victor Poulain de Bois Angers, Brompton, Middlesex; Alfred Taylor, Newcastle-on-Tyne, Northumberland; Robert Christopher Frost, Newcastle-on-Tyne, Northumberland; and William Henchman Chubbe, Beccles, Suffolk. At the same meeting of the Court, Mr. George Alexander Hallian, passed his examination for Naval Surgeon. This gentleman had previously been admitted a Member of the College, his diploma bearing date April 21, 1845.

THE FELLOWSHIP.—The Council of the College of Surgeons have just given notice, that the next professional examination for the Fellowship will take place on Wednesday and Friday, the 3rd and 5th of April next, and the examinations in Classics, Mathematics, and French, required of candidates who have not been eight years members of the College, will take place on Tuesday, the 2nd of April. Vide our advertising columns.

NAVAL APPOINTMENTS.—Surgeon G. D. Maclaren (1837) to the Blenheim steam-guardship at Portsmouth.—Surgeon A. R. Bradford (1838) and Assistant-Surgeon Richard King (1846) to the Resolute.—Surgeon James J. L. Donnet (1846) and Assistant-Surgeon John Ward (1843) from the Dasher to the Assistance.—Assistant-Surgeon Thos. R. Pickthorn (1842) to the Pioneer. The Resolute, Assistance, and Pioneer, are fitting for the Arctic Expedition.—Assistant-Surgeon William Patrick to the Dasher steam-vessel, at Woolwich, vice Ward. Surgeon W. B. Fegan (1847), and Assistant-Surgeon A. Armstrong, M.D., (1846), to the Lily, 12.

OBITUARY.—At Kaira, Bombay, on the 6th ult., of jungle fever, T. A. Boyrenson, M.D.—In August last, wrecked on his passage from Wellington, New Zealand to Port Victoria, Akaroa, Edward Young, Esq., Surgeon.—Acting Superintending Surgeon, J. J. Stokes, H.H., of the Nizam's Army at Ellichpoor, on the 30th December, 1849.—On the 27th inst., Walter Carver, Esq., half-pay Surgeon of the Fourth Veteran Battalion, in his 75th year.

UNIVERSITY COLLEGE.—The only portion of the annual Report which concerns our readers is that which refers to the Medical Department. The number of medical students was 284, being less by 31 than in the previous year. The amount of fees received from them was 4964*l.* The sum of 1343*l.* 18s. was received from students attending hospital practice, and was added to the Hospital funds. The entries for the current Medical Session were in number 236, of which 50 were freshmen. The school of analytical Chemistry had 37 students. 5 University College students took the degree of M.D. at the University of London, and 5 that of M.B.; 6 became Under-Graduates in Medicine; 167 passed the Matriculation examination.

KING'S COLLEGE HOSPITAL.—123 cases of cholera were treated in this hospital during the past year, of which number 83 recovered. 21,048 patients were attended to, being 1,665 more than during any previous year: the number of in-patients was 1,261, and 424 poor married women were attended in their confinements. There was an increase of 107*l.* in the donations, and of 75*l.* in the subscriptions, the receipts being 4,512*l.* 9s. 11d., the disbursements being in excess by 148*l.* 5s. 3d. The building fund amounted to 26,000*l.*, "a friend of the hospital" having presented 5,000*l.* under certain conditions, and the Council of King's College having contributed the same amount. The Grange estate has been purchased, and it is contemplated to commence building the new hospital in a few months. The site, the same unhealthy spot as the present, is badly chosen: even were there no other reason, the contiguity of the "green ground" alone would be sufficient to render suspected the judgment of those who selected the place on which the new hospital is to be built, and so large a sum expended. In all cases where new hospitals are built, or old ones rebuilt, Government should give a piece of ground sufficient for the wants of the institution, and duly selected with reference to the necessities of the poor, and the health of the inmates. Certainly, an institution for healing the sick should not overlook an over-crowded, rank, and reeking burial-ground.

LONDON HOSPITAL.—At a Quarterly General Court of Governors, on Wednesday, it transpired that the number of patients admitted since last quarter was 930, of whom 448 had been discharged cured, much relieved 395, and 87 had died. The in-patients then on the books were 329, out-patients 1,796. Legacies to the amount of 600*l.* had been received, and among the donations was 5*l.* 4s. 4d., from a body of workmen, collected in sixpences and pence. During the last year there had been a total of 20,906 in and out-patients.

THE LEVEE.—The following members of the Profession were presented at Court on Wednesday last:—Mr. William White Cooper; Mr. D. Cullimore; Professor Fergusson, F.R.S.; Dr. Gilkrest; Professor Owen, F.R.S.; Sir John Richardson; Dr. J. Stevens; and Dr. Stevenson Bushnan. The following distinguished members of the Profession were also present:—Sir James Clark, Sir David Davies, Sir Alexander Mackenzie Downie, Dr. William Lloyd, Dr. Granville, Dr. Marsden, Dr. Billing, Dr. Holland, Dr. Jeaffreson, and Dr. Fergusson.

THE LONDON PRISONS.—The Medical Officers and Governors of the Houses of Correction in Coldbath Fields and at Westminster, and of the House of Detention, having decided that the alteration in the Diet-table ordered by the Secretary of State for the Home Department could not be carried out with safety, the Middlesex magistrates have passed a resolution that it is not desirable to adopt the proposed alterations, and have communicated that resolution to the Home Secretary.

CORONERS' EXPENSES.—Mr. Wakley, from Jan. 1 to Feb. 2, 142 inquests, 391*l.* 3s. 5d.; Mr. Baker, for the same period, 135 inquests, 451*l.* 14s. 3d.; Mr. Bedford, 32 inquests, 83*l.* 10s. 4d. There is a marked difference in the number of inquests held, and the expenditure incurred by the two County Coroners; nor is it easily to be understood why 135 inquests should cost 451*l.* 14s. 3d., and 142 only 391*l.* 3s. 5d. The matter requires investigation. We are bound at the same time to express an opinion that there could hardly have been a necessity for 309 inquests in the short space of thirty-two days. If coroners were paid by salary and not by fees, the county expenditure would be greatly lessened. The fee system in this case is decidedly erroneous.

SURGEONS' FEES UNDER THE NUISANCES ACT.—Dr. Deas, surgeon to the parish of St. Cuthbert, Edinburgh, having been applied to by Mr. Murray, the inspector of cleaning, &c., for his professional assistance in examining into, and reporting on, cases of nuisances, did so in eighty-five cases, besides subsequent attendances at the police courts. For these services Dr. Deas charged one guinea a case, which Mr. Murray refused to pay, but *modestly* offered 10*l.* 10s. in payment of all demands. Dr. Deas very properly considered this offer as inadequate, and proposed to leave the charge to be adjudicated on by Dr. Wood, or any other respectable practitioner in Edinburgh. Mr. Murray declined this, and, consequently, Dr. Deas has commenced legal proceedings to recover the sum of eighty-five guineas. A meeting of the Commissioners of Police has been held since the proceedings commenced, and they have determined to remit the matter to the Law Committee, to oppose the action, as they are the parties really liable, Mr. Murray being merely the nominal defendant. We sincerely trust that Dr. Deas will succeed in his action, and prove that our overburdened and overlaboured Profession will no longer consent to do the work required of it by Government, or the powers that be, without adequate remuneration. Everybody acknowledges that we are an ill-used class of men, and shamefully underpaid for our important services, and yet no one is willing to take any steps to remedy our position. We must put our own shoulders to the wheel, or we shall never be clear of the rut.

CENTENARIANS.—At Woodelew, parish of Ballyhooly, there died, within the last twelve months, two cousins; the one, John Howard, aged 111,—and the other, James Magner, 110. They were both able to walk a distance of two miles to chapel on Sundays, and had great-grandchildren grown up and married.

M. COURTOIS.—We are glad to perceive that a subscription has been set on foot in favour of the widow of Courtois, the discoverer of iodine. The object proposed is, to procure admission for Madame Courtois into the "Hospice des Ménages;" and the sum required for the purpose is 1500 francs.

TEIGNMOUTH DISPENSARY.—Mr. Hoare, of Luscombe, has presented 500*l.* to the Dispensary at Teignmouth. He had given 200*l.* previously to the same Institution.

A RESOLUTION has been passed by the inhabitants of Torquay, to the effect that interments in Upton churchyard were prejudicial to health. The meeting further resolved, that the formation of a cemetery was highly desirable.

IN the Henby Churchyard Almshouses, lately died Sarah Chance, who, since January, 1838, took fifty-one gallons, two pints, and five ounces of laudanum, at a cost of 110*l.* 8s. 4d. The anodyne was taken to relieve the pain arising from ulceration in the legs.

PROFESSOR DE CANDOLLE.—We learn with much regret that the state of political affairs in Geneva has induced this celebrated botanist to retire from his Professorship and the direction of the Genevese Botanical Garden.

THE HERBARIUM OF THE UNITED STATES EXPLORING EXPEDITION.—The botanical collection formed during this extended voyage is to be arranged by Dr. Asa Gray, with the exception of the plants of California and Oregon, which have been entrusted to Dr. Torrey to be added to the "Flora of North America."

POLICE AND THE MEDICAL PROFESSION.—A Correspondent of the *Times*, signing himself "A Surgeon," quotes a paper he has received, giving the description of a woman whose husband and brother are suspected of burglary. As the woman is close upon her confinement, the object is, that the medical man who may attend her shall give proper notice to the authorities, and thus, perhaps, secure the burglars. Upon this, the above gentleman remarks: "The police authorities are under a great mistake, if they think that the sacred confidence which necessarily exists between medical men and their patients admits of any exception. We are not a detective force." There can be little doubt, that he will have general sympathy in the conclusion he has come to.

TESTIMONIAL TO WILLIAM BUSH, ESQ., Senior Surgeon to "the Bath Ear and Eye Infirmary."—A very handsome silver library inkstand, bearing the following inscription, was presented to the above gentleman on Monday last, in the presence of the parochial Clergy, and a large number of the inhabitants of the parish of Weston, assembled for the purpose in the Infant school-room. Inscription:—"Presented to William Bush, Esq., one of the Medical officers of the Bath Union, by 456 contributors, consisting chiefly of the poor of Weston, with whom the subscription originated, in grateful testimony of the kindness, skill, and unwearied attention, with which he devoted himself to the service of the sick in that parish, during the prevalence of cholera in the year 1849." It is gratifying to remark, that the idea of presenting a testimonial to Mr. Bush emanated from the poor, many of whom experienced his valuable and zealous attention during the time of the late epidemic; but the subscription was by no means confined to this class—the same feelings of respect and gratitude towards that 'gentleman pervading every rank of society in the parish of Weston.

CHOLERA AT WORCESTER.—The Report of the Health Committee at Worcester, on the expenses incurred on account of the cholera epidemic, is as follows:—Cost of erecting Hospital, 94*l.* 9s.; four Medical Officers, 83*l.* 9s. 6d.; nurses, messengers, hospital-sergeant, provisions, spirits, drugs, &c., &c., &c., 169*l.* 15s. 2d.; being a total of 347*l.* 13s. 8d.; from which is to be deducted 44*l.* 16s. 10d., to be repaid by the Droitwich Union. The Houses of Refuge cost 832*l.* 13s. 4d.: among the items are 7*l.* 7s. for Medical Officers; 229*l.* 15s. for District Medical Officers, attending 81 cholera cases, and 571 diarrhœa cases; 47*l.* 17s. 8d. for drugs; 73*l.* 0s. 8d. for removal of nuisances, inspectors' and clerks' salaries, medical certificates, &c. Total number of diarrhœa cases, 571; of cholera cases, 89. Deaths from cholera, 39; from diarrhœa, 4. 21 cases were admitted into the Cholera Hospital, the expenses attending the establishment of which were 34*l.* 13s. 8d. The rate of mortality in the building was 66 per cent. A proposal was made by the Worcester Town-council, before whom this Report was read, to pay Mr. Orwin 25*l.* for past services. Some members of the Board considered this sum too little, and it was recommended to make it 30*l.* The amendment failed, however; and the Report was received as it originally stood. Alderman Evans was in favour of the appointment of a permanent Officer of Hygiene, but his proposal was not seconded.

TO CORRESPONDENTS.

A press of matter prevents us this week replying to numerous friends, and inserting many letters.

ORIGINAL LECTURES.

LECTURES
ON
CLINICAL MEDICINE.
DELIVERED AT UNIVERSITY COLLEGE HOSPITAL.

By R. A. PARKES, M.D., Lond.:
Member of the Royal College of Physicians, Professor of Clinical Medicine in University College, and Physician to the Hospital.

LECTURE VI.

Case of Tubercular Cachexia—Deposition of Tubercle in the Lungs, Bronchial Glands, Peritonæum, Alimentary Mucous Membrane, &c.—Consideration of other Independent Affections, viz., Granular Liver, and thickened Pylorus.

GENTLEMEN,—The two or three cases which I intend to bring before you in this and in subsequent lectures, are examples of a disease which cannot be studied too profoundly. The time we can give to its consideration is, necessarily, quite inadequate for its full discussion, yet I think we shall be able to pass over some of the most important ground. Before entering into the history of the case, let me ask you to look at the specimens on the table, which are portions of organs taken from the body of the patient whose case we are about to consider.

You will observe here portions of lung more or less infiltrated with firm tuberculous substance; both in the upper and lower lobes you will see some cavities of small size; the pleuræ, you will notice, are covered with an exceedingly dense false membrane, most abundant at the apex of each lung, which it covers like a cap, gradually thinning anteriorly and posteriorly, as it descends, but existent still everywhere over the lung. Here is a small piece of granular liver; here is the pyloric orifice of the stomach in a state of chronic thickening; here, also, is a piece of kidney, presenting an exudation of a small quantity of white hard substance into one pyramid and into the adjoining cortical substance; and here, lastly, is a small piece of intestine, exhibiting certain ulcers on its mucous coat. In addition, in the man from whom these specimens were taken, the pericardium was found united by old adhesions; there was formation of false membrane and of semi-transparent miliary granulations on the peritonæum, and effusion of fluid into the peritonæal cavity; the spleen was covered with a layer of false membrane, resembling that coating the apices of the lungs in appearance and density.

Keeping these facts before us, let us consider this case a little more minutely.

Andrew Cavanagh, aged 50, admitted April 18, 1849; born in London; of healthy parents; a labourer; habits intemperate; always had good food and sufficient clothing; of moderate stature; usually rather thin, but strong; no severe illness of any kind till present attack, except gonorrhœa thirty years ago. For some time,—three or four years, he has been subject to nausea and vomiting about thirty or fifty minutes after taking food. The present illness began, eighteen months before admission, with slight cough, which gradually increased in severity, and was subsequently, at a doubtful period, attended several times by slight hæmoptysis. Eight months before admission, he noticed that his breath became short, and this symptom increased till, about six weeks before admission, the dyspnœa became distressing on quick movement. These seemed to be the only symptoms noticed by the patient.

Let me now mention the diagnosis we made, and then we can consider briefly the reasons which led us to it.

The diagnosis was—tubercles both apices, chiefly right; chronic bronchitis, with some emphysema; dilatation of a bronchial tube; fibrinous granulation or cirrhosis of the liver; simple chronic thickening of the pylorus.

The peritonitis and intestinal ulceration came on at a subsequent period, and were subsequently diagnosed. The affections of the pleuræ and the pericardium were not discovered till after death.

What were the principal reasons which led us to this diagnosis? In the first place, we had before us a man much emaciated and weakened, breathing with evident effort, twenty-eight times per minute, with a violent paroxysmal cough, followed by copious opaque yellow viscid expectoration, in masses, and without air-bells; and with a pulse beating feebly 112 times per minute in the recumbent position. These symptoms, taken in connexion with the presence of long continued dyspnœa, the hæmoptysis, and the absence of the general symptoms of heart affection, such as dropsy, pointed strongly to phthisis. Yet it might have been many other affections, and from these symptoms alone a diagnosis was not possible.

The positive objective symptoms were as follows:—

1. The skin was dry, hot, and harsh; the cheeks were slightly flushed; the nails were rounded and bent.

2. There were no signs, subjective or objective, referrible to the organs of sense.

3. There were no signs referrible to the larynx.

4. The chest was rounded, indeed, quite barrel-shaped; the clavicles were prominent; the hollows above and below them very deep; the supraspinous fossæ were excavated; the intercostal spaces were extremely marked, more so than could be accounted for by the general emaciation; during inspiration the ribs scarcely moved; the tape carried round close to the axillæ gave exactly the same measurement on each side, viz., 16¼ inches; the expansion was abolished, since the size did not change, either on the fullest inspiration or expiration; one inch below the nipples, the right side measured 15½, and the left 15½; and at this point there was moderate expansion of the left side only. The *vocal fremitus* was too well marked under the right clavicle—not particularly changed elsewhere. The *percussion note* was dull, with increased resistance both before and behind at the apices, but duller right than left. In the mammary and lateral regions the sound was even clearer than usual, and in the back, particularly at the left base, was decidedly too clear. *Auscultation* gave us the following signs. At the right apex dry tubular inspiration and expiration, or, perhaps, the inspiration might be called almost tubular, the expiration markedly so. At the left apex, the inspiration was coarse; the expiration blowing, with a little cooing. In the right mammary region, where the percussion note was so clear, the respiration was abnormal; the inspiration was rough and coarse; the expiration prolonged, blowing, and tubular, with a little coarse, submucous rhonchus. In the back, at the angle of the left scapula, was very loud tubular inspiration and expiration. At both bases, the expiration was prolonged, and there was a little submucous rhonchus here and there. No friction was heard anywhere. The *voice* was extremely resonant under both clavicles, and at the angle of the left scapula, when it had a squeaky note.

These signs pointed unequivocally to the existence of consolidation, and the general evidence of the case, into which I need not enter, went to the conclusion, that this consolidation was tubercular. The other chief points of interest connected with the apices were these; although the cough had existed for eighteen months, and the slight hæmoptysis had occurred nearly as long ago; and, although the general bodily condition had suffered exceedingly, the process of softening of tubercle had gone on very slowly, or had not even commenced. There were no moist rhonchi at either apex at this first examination, nor for some time subsequently; there was, it is true, much expectoration; still this might have come from the bronchial tubes in other parts of the lung, in which submucous rhonchi were heard. So also under the right clavicle, there was very loud tubular breath-sound; so loud, indeed, that it was impossible to say there was no cavity; and yet since, with firm deposition round a bronchial tube reaching to the surface, the tubular breath-sound might be as intense as it was in this case, it was at first impossible to say there was anything more than abundant solid deposit. I thought it not unlikely that, if there was this firm deposit at the apex, a bronchial tube might be somewhat dilated, and give rise to rather more sound than one of the usual calibre. It appeared probable, also, that in the right mammary region, where there was tubular expiration, without dulness, on percussion, there might be also an enlarged tube. But the diagnosis as to this was not certain. Let me remark, as a digression, that dilatation, of course to a moderate extent, of the smaller bronchial tubes, and probably of the air-cells, occurs in some cases with great rapidity in the neighbourhood of tubercular depositions, which have obliterated some portion of pulmonary substance. This occurs, perhaps, in most cases at the apices, and, in old cases, reaches to a considerable extent; but it can be seen most markedly in some cases of acute phthisis, in which tubercle is deposited rapidly in the greater portions of the lungs, as well as in other parts of the body; by inflating, drying, and slicing the lung, you will be astonished at the uniform, though slight, dilatation of the smallest bronchial tubes (and, perhaps, of the air-cells) in the intervals of the tubercles. In the same way, in other cases, in which portions of lung are obliterated, from any cause, dilatation, to a greater or less extent, and more or less rapidly, occurs in the neighbouring smaller tubes and cells. I thought this was, probably, the case in the present instance, both under the clavicle and in the right mammary region; and I believe this opinion was correct, as the process of softening could be distinctly traced to a period later than this, and, even after continuing for some time, was, comparatively, so imperfect, that at death the cavities were of small size. Such was the condition of the apices; now, in the other parts of the lung, there were, at this time, signs of bronchitis, affecting moderate-sized tubes, and of either a cavity, or, more probably, a mass of tubercle surrounding a large tube, near the angle of the left scapula. On account of the unusual clearness of the percussion-note in various parts, particularly at the left base, and of the prolonged expiration here and there, the existence of a certain amount of emphysema, and, possibly, of some tubercular infiltration, seemed very probable. But two symptoms still remained unexplained, and these were, the extreme immobility of the ribs, and the rounded form of the chest. The existent emphysema could not account for these, and we could make out, from the history of the case, no evidence of pleurisy; and, even if we referred these conditions to pleurisy, we must have supposed that both lungs had been nearly uniformly affected; and that, if there had been effusion, it had been absorbed, and the lungs had become coated with a dense contractile false membrane. In fact, the lungs were coated with a dense layer, although, at the time, I considered that there was not sufficient evidence of this. Therefore, the significance of these two signs remained for us obscure.

The further changes which occurred in the lungs up to the time of death may be here briefly described. Ten days after admission, the tubular inspiration and expiration, at the angle of the left scapula, seemed increasing; and, after this, rapidly increased till there was perfect cavernous respiration. For in this case, as in others, although, at first, tubular respiration may be as loud as, and be, in fact, indistinguishable from, some cases of cavernous respiration, yet when a cavity presents all the condition for concentration of sound, the cavernous respiration then produced is such as could not proceed from any undilated bronchial tube, under any conditions for augmentation and transmission of sound. About the 10th or the 12th of May, moist rhonchi began to be heard under both clavicles, and from this time the process of softening went on with some rapidity, so that, in a short time, we had cavernous respiration, gurgling, and perfect pectoriloquy, to use Laennec's phrase, under both clavicles. Moreover, in various parts of the chest we commenced to have a rather fine subcrepitant rhonchus of a peculiarly dry character; that is to say, it seemed to be caused by a thick, tenacious, unyielding liquid: these rhonchi were followed by prolonged and sometimes whiffling expiration; they were persistent,—that is, were not removable by coughing,—and were heard in the same place day after day, and, after a time, became manifestly attended by dulness on percussion. They were, no doubt, caused by gradual deposition of tubercles throughout the lung, and by the bronchitis attendant or consequent upon this.

During the illness, the expectoration, from time to time, contained blood, always in small quantities; it presented otherwise the appearance of a dense greenish-yellow fluid, very tenacious, in masses, and without air-bells.

While these signs are still fresh in your minds, let me briefly describe the condition of the lungs as found after death. Both lungs were universally and most firmly adherent; they were coated with a false membrane, which, at either apex, was about a quarter of an inch in thickness, and over the whole surface was generally two lines in thickness, sometimes more. There did not seem to have been, at any time, liquid effusion into the pleuræ. Both lungs were almost universally infiltrated with firm tubercles, were, consequently, nearly solid, and admitted very little air; the parts freest from the tubercle were the bases and the anterior margins. Small cavities existed in both lungs; they were more numerous, and nearest to each other, at the apices; in the lower lobes they were few, small, and distant. Between the cavities in the upper lobes, the pulmonary substance was exceedingly dense and firm from the infiltration, of hard grey tubercle, and apparently of common exudation matter into the pulmonary substance; in the spots where the substance was densest it grated under the knife; the colour was greyish black, or a mixture of grey and black, or black streaks traversing a grey ground. In other parts of the upper lobe, the infiltration had been less general, and the tubercle had assumed the form of granules and nodules, which projected from the surfaces of sections, and were surrounded by firm, condensed, sometimes black, pulmonary substance. The bronchial tubes running through the condensed portions were in places obliterated; in others manifestly dilated, more or less regularly, for a considerable extent. In addition, these dilatations appeared to form some of the smaller cavities, which were about the size of a pea, manifestly continuous with the tubes, and lined by a smooth membrane. The larger cavities were very irregular in shape, with exceedingly irregular and nodular hard dark-grey or brown walls; they were crossed by fræna, (which were very dense, and some of which evidently enclosed a vessel of some sort in their interiors,) and contained a small quantity of purulent, dirty-looking fluid. In the lower lobes, the tubercular deposition was in the form of hard grey, irregular-looking nodules and miliary granules, set very closely together; there were a few small cavities here and there, from partial softening, and not from bronchial dilatation. In no part of either lung was any yellow tubercle, but yellow tubercle existed in some of the bronchial glands; other bronchial glands were enlarged, firm, grey, with black streaks, and masses of black substance. The mucous membrane of the epiglottis, larynx, and trachea, were free from tubercular deposition or ulceration.

Now, there was no doubt, from the stethoscopic signs, as well as from the appearances after death, that this deposition of firm grey exudation had commenced in the upper lobes, had proceeded to some extent before the patient entered the hospital, and subsequently gradually extended to the rest of the lungs from above downwards.

Under the microscope, the softer grey matter appeared chiefly granular; the tubercle corpuscles were extremely indistinct. In the firm, dense, greyish-black portions, there were the remains of pulmonary substance, bronchial tubes, &c., imbedded in and obscured by granular matter, of the usual kind. I did not discover any unequivocal exudation corpuscles. Scrapings from the walls of the cavities were composed of shreds, exudation, and pus cells.

Such was the state of the lungs; before considering the meaning of these appearances, let me call your attention to the condition of the other organs.

5. What was the state of the heart on admission? The apex was beating in the natural position; the impulse weak but regular; the præcordial dulness not increased,—at the base, the second sound sharp, particularly at the second left cartilage; at the apex, the first sound rather short. There was no friction, either now or at any future time. Now, after death, this was the state of the heart; there were adhesions of the pericardium; these, from their appearance, were evidently old; they were lax, and almost universal; there was no tubercle to be found in them; the heart weighed 10 oz.; the endocardium, in the left auricle, was slightly opaque; there were a few points of atheroma on the aortic flap of the mitral, and the aortic valve was very slightly beaded at one or two points; otherwise, all the cavities were natural as to size; the valves were competent; the substance of the heart unaltered. The adhesions, as I mentioned to you, were not detected during life; in fact, they gave rise to no signs whatever, and were absolutely, at this period of the case, indetectable.

6. The state of the liver was as follows:—The liver dulness commenced at the lower margin of the fifth rib, was perfect an inch below, and extended half a finger's breadth below the false ribs. Its size was a little smaller than usual. The edge could be distinctly felt, on account of the emaciation; it was rounded, extremely hard, and distinctly, though slightly, rough and nodular. I had little difficulty in deciding, from these signs, in connexion with the fact, that the man had been a spirit-drinker, that the liver was granular. Had the edge been less irregular, though still rounded, it could not have been easily decided whether it was not some form of fatty liver, particularly as the case was one of phthisis; but, I believe, that when a small liver can be distinctly felt to have this hard, rounded, granular, or nodular character, we may be certain that there has been such an infiltration of contractile material as to bring the case within the category of true fibrinous granular liver. In cases of malignant disease, in which the edge very rarely presents this even and comparatively fine granular character, the liver, is, I think, generally much larger than in the cases now referred to. So, also, it is generally larger in uncomplicated cirrhosis, this term being applied to a disease commencing in stasis or enlargement of the biliary ducts. After death we found that this diagnosis was correct; the liver was small, weighing only thirty-nine ounces; the surface presented certain characters to which I shall presently allude; the form was rounded; the edge nodular. On section, the liver presented a granular aspect, formed by round reddish or yellowish projecting portions of tolerably uniform size (evidently the hepatic tissue,) which were separated by deepish sulci, formed by a hard, greyish, in some parts semi-transparent substance, which was not only disposed immediately around the lobules, but also in the sheaths of the portal canals, which were manifestly thickened, almost throughout the whole liver. Under the microscope, the hepatic cells were rather more fatty than usual, a change which is almost always found to accompany any amount of contracted granular liver, but which is entirely secondary, and a consequence of the impairment of function produced by the pressure of the effused exudation material.

Leaving, now, the liver for a moment, what was the state of the other organs in the abdomen? The abdomen was itself of normal size, and not in the least tender; there was no fluid in the peritonæal cavity. There was no tumour at the pylorus, but the stomach note was exceedingly extensive, partly from the diminution of the liver, but chiefly from an evident augmentation in the size of the stomach itself. The clear stomach note extended both higher and more to the left than is at all common. Now this was rather an important sign, (particularly as the case was phthisis, in which the stomach is often lowered,) as when it occurs in connexion with three other circumstances, it has appeared to me to have, in some cases, a certain significance. These circumstances were, that the man was a spirit-drinker, and had, for some years, suffered from vomiting half or three-quarters of an hour after dinner, and did not present, at the time of examination, any signs of malignant disease of the stomach.

Now, when these things occur together—chronic vomiting at the time specified, an enlargement of the stomach, and a habit of spirit-drinking, and if we are able to exclude malignant disease, which sometimes gives rise to dilatation, sometimes to contraction of the stomach, then I have several times successfully ventured on the diagnosis of simple thickening, or, as it used to be called, scirrhus of the pylorus. But, to warrant this, the signs must be clear; and frequently, in these cases, there is enlargement of the liver, or some other condition present, which does not allow us to determine correctly the size of the stomach. You must understand, also, that I speak only of simple pyloric stricture, and not of chronic thickening of the coats of the stomach themselves, to a greater or less extent, a condition which is generally attended with diminution in the size of the organ. After death the diagnosis was confirmed; the size of the pyloric orifice was diminished by great and firm thickening, having its seat chiefly between the mucous and muscular coat. The new layer was about a quarter of an inch in thickness, and, on microscopic examination, was found to consist of fibres closely resembling the white fibrous tissue; there were a few yellow elastic fibres mixed with the white fibres.

So much for the stomach; there were no symptoms at this time referrible to the intestines.

What was the state of the kidneys? There were no objective or subjective symptoms referrible to these organs themselves. The urine was, throughout the illness, in normal amount; always acid, of a specific gravity, varying from 1018 to 1028; always of a deep orange colour, and, for the last eight or ten weeks of life, continually depositing a very copious sediment of dark-red amorphous lithates, which occasionally took a very well-marked and beautiful pink tint. In one report a trace of albumen is noted; otherwise, the urine was perfectly free from this substance. The chief points about the urine were, the high colour and the abundance of red and pink lithates, a state of things which has been especially noticed by Becquerel in his cirrhosis of the liver,—the disease I have termed in this lecture fibrinous granular liver. After death, we found the kidneys of normal size, and in all respects healthy except at one point; the base of one pyramid, and the adjoining part of the cortical substance, were occupied by a fibrinous exudation, about the size of half a marble, of a white colour, and cutting very firm. Unfortunately, I did not examine it microscopically while it was fresh, and do not like to speak to its characters; but its appearance was quite characteristic.

The spleen did not appear enlarged; there was no increase in the splenic dulness, nor any tenderness on deep pressure in the left hypochondrium. After death, however, the spleen was found to be rather large, *i. e.*, weighing 8½ oz., and was coated by a dense thick false membrane, which was thickest at the upper end and on the anterior surface. The substance, to the naked eye, did not appear much changed; it was softish and of a chocolate colour.

After admission, we had some other pathological phenomena presented by the abdominal organs.

On the 7th May, a little diarrhœa (*i. e.*, five to eight stools per diem) came on, attended with griping, slight tenesmus, and pain, on pressure, in the cœcal and umbilical regions. We administered various remedies for this; it was finally checked by the use of starch and opiate enemata, in ten days, and did not again return. Now, diarrhœa coming on at this period of phthisis is generally dependent on tubercular or other ulcerations; but when it was arrested so easily I began to doubt whether this was the case here. However, after death, we found ulceration in both the large and small intestines to a limited amount. There was only one patch in the small intestine, about half an inch above the cœcum; it was an inch in diameter, with sharp, defined and irregular projecting edges. In the projecting edge were little masses of yellow tubercle, some of which were beginning to soften and to cause the enlargement of the ulcer in the usual way. In the neighbourhood of this patch the solitary glands were a little enlarged; but elsewhere the glands, both solitary and agminated, were indistinctly marked. In the ascending colon, about 15 in. from the cœcum, was a similar patch, with masses of yellow tubercle in its irregular curving edges, and with a greyish floor, formed by the submucous tissue, and in some parts by the circular muscular fibres. Three similar patches existed at distances of 3, 12, and 4 in. from each other; the rest of the mucous membrane was pale, free from ulceration or tubercle, and yielded good strips; the solitary glands were not enlarged. The case gave a good example of the true tuberculous ulceration, in which the foreign matter is deposited under the basement membrane, which is destroyed over it, and then by the ready liquefaction of the tubercle the ulcer is formed, and

is extended by a repetition of the same process in its edges and neighbourhood; there need not necessarily be any affection of the glandular apparatus.

On the 17th of May, then, the diarrhœa was arrested; all the abdominal symptoms vanished; the pulmonary symptoms were advancing gradually, and the general health failing. So things went on for about six weeks.

In the beginning of July a fresh phase of the disease appeared. The patient began to complain of pain in the right hypochondrium and epigastrium; subsequently, also, about the umbilicus. This became exceedingly severe; he could hardly bear any examination. The pain was so intense, that in spite of the man's weak state, I ordered leeches. Five days after its appearance the pain gradually went off; but now fluid evidently began to form in the peritonæal cavity. On the 12th of July there was obscure fluctuation; when he lay on his back, and the abdomen was percussed from the umbilicus laterally, the sound deadened on either side at 5 in. from the navel. When he turned over on the side, the elevated flank became clear, the lateral dulness increased on the opposite side. A few days afterwards the abdomen began to swell, became rounded in form; the umbilicus became flat, and finally everted; and this state of things continued till death, which took place in the middle of August.

What, now, was the cause of this ascites? Excluding at once perforation of the intestines, there were only two causes which seemed to me to be at all probable. One, of course, was tubercular peritonitis, terminating in effusion. The state of the lungs warranted such a supposition; the extreme pain pointed to peritonæal inflammation of some sort. This, in fact, I believe, was the cause. But another explanation was possible. Was not the ascites simply the result of the gradual progress of the disease of the liver? Was not the severe pain the result of a little acute superficial inflammation of the liver? One circumstance gave such strength to this notion, that I almost adopted it. It was this—while the pain was so severe, it was hardly possible to examine the abdomen properly; but a few days afterwards, and when fluid was beginning to collect, I was surprised to find that I could no longer feel the rounded hard edge of the liver; in fact, the organ seemed to have retreated upwards, inasmuch as, instead of the percussion note being dull down to the very margin of the false ribs, it was quite tympanitic for 1½ in. above the margin. Therefore, I thought the liver must have been undergoing contraction, which had been unnoticed, and that the ascites was the result of this impediment to the portal circulation. But, after death, a curious and instructive state of things was revealed. Peritonæal inflammation had been set up; the stomach was connected to the diaphragm, and the colon, by recent granular soft and fragile lymph; the convex surface of the liver was covered with a layer of fine granular lymph, and the transverse colon had become insinuated between the liver and the ribs, and had become united to both. The anterior margin of the liver was in this way completely covered by intestine, and the clear note, on percussion, at the margin of the right false ribs, was due to this circumstance. In addition to these adhesions and fragile granular false membrane, the intestinal serous coat was thickly strewn with hard, almost transparent miliary grey tubercles. I call them tubercles, although I did not examine them microscopically; but I think there can be no doubt as to their nature. There was a good deal of fluid in the sac of the peritonæum. The mesenteric glands were, I believe, tuberculous; but, as through an oversight their condition has not been recorded, I shall say nothing about them.

Such were the pathological phenomena of this complicated case. Let me now proceed to call your attention to some inductions which may be made from it.

1. What was the order of succession of these numerous lesions, and how were they related to each other?

Taking the date of the admission into the hospital as a definite period, we are enabled to state with absolute certainty that the disease of the liver, the chronic thickening of the pylorus, and the firm grey infiltration into the apices, and in a less degree, perhaps, in other parts of the lungs, existed at that time, and that the intestinal ulceration and the peritonitis came on at subsequent known periods. We are able to state, also, that it is *very probable* the pleural exudation also existed at the time of admission. This seems likely from its kind, which evidently betokened age and slow formation, from the positive symptom afforded by the immobile ribs, and from the negative evidence that we got no symptoms of pleurisy while the case was under our care. If this were the case, then the dense plastic exudation in the pleura, which at the apices might be called semi-cartilaginous, preceded the greater part of the deposit in the lungs, was positively anterior in point of time to the greater part of such exudation. The question then arises, was the pleural false membrane anterior to *all* the deposition, even to that at the apices, or was it a consequence merely of this, as usually supposed, and deposited secondarily to the pulmonary infiltration? Now, the dense firm capping of the lungs in this way generally coincides with the presence of large cavities in the apices. Louis states that one of the morbid states of the pleura proper to phthisis "is the cartilaginous cap investing the apex of the lung when extensively excavated." Now, in our case, certainly at the time of death there were cavities at the apices, but they were by no means large, and at the time of admission did not exist, so that unless these semi-cartilaginous caps formed after admission, which we have considered unlikely, they must have been formed previous to any cavities. If they were secondary to the disease in the lungs, it must have been simply to the *solid* deposit. Were they secondary, then, to the solid deposit? Three arguments support such a view: 1. The fact that they undoubtedly are usually secondary*; 2. The evidence we have in the fact of the occurrence of hæmoptysis some months before the man came into hospital, which seems to indicate a deposit in the lungs at that time; 3. The pleural exudation was thickest at the apices, where the pulmonary infiltration was oldest, greatest, and nearest to the surface. I should have no hesitation in adopting this view, of the secondary nature of the pleural exudation, but for one reason, which I am not sure is of much weight. The dense false membrane which covered the upper end of the spleen was similar, except in being still denser, to the thick caps of the lungs. Now, when was this deposited? Not certainly during the last attack of peritonæal inflammation. Could it possibly have been owing to the same cause as the pleural exudation? had it any connexion with the tubercular cachexia at all? I do not know that there are any facts on record which should lead one to connect the two things together; and yet we should not omit to note the formation in this man of a dense membrane at the top of the spleen during the time, as far as we can make out, that hard tubercles were being deposited in the lungs, and a similar dense false membrane was forming at their apices.

If there is some difficulty in deciding as to the time of formation of the pleural exudation, there is no less difficulty in determining the epoch of the pericardial adhesions. Certainly these adhesions existed before the man entered the hospital, as is evident from their character, and from the negative evidence afforded by the absence of all signs of disease of the pericardium while he was under observation. Was the pericarditis, then, anterior to the pleurisy or the tubercular deposition; did it follow these as its causal antecedents, or was it independent of, although subsequent to, them? To answer this question, I must refer very briefly to the causes of pericarditis. You are aware that as far as forty cases can settle a point of this kind, it has been shown by the admirable researches of Dr. Taylor, that pericarditis comes on under three conditions; first, during the course of an acute disease—acute rheumatism; secondly, during the course of a chronic disease,—Bright's disease; and thirdly, as a consequence of extension of inflammation from the pleuræ, the left principally. To these causes we might, perhaps, add as comparatively unusual forces in its production, the tubercular diathesis, scurvy, and certain constitutional affections arising from the introduction of morbid poisons, such as pus, or the agents of various specific diseases. Now this man had no Bright's disease, for, during the whole course of his illness there was only once a slight and doubtful trace of albumen in the urine, and there were no other symptoms at all of kidney disease, nor signs of it after death, except in the particular I mentioned to you. This patient also had never had acute rheumatism, nor even rheumatic pains. He had not, of course, scurvy, nor were any of the morbid poisons, to which I referred, present. Was the pericarditis, then, tubercular? It was not the consequence of local deposition of tubercle in the pericardium, as we could see nothing like tubercle, and the adhesions looked like the usual products of inflammation; but possibly it may have been produced by the tubercular cachexia, in which inflammations of various parts often come on, independently of the actual presence of the tubercular exudation which is usually the sign of the cachexia. Possibly, also, this pericarditis had come on as a consequence of the pleurisy. Yet it has not been proved that pericarditis will thus follow this dry, plastic, subacute pleural inflammation. As to the condition, therefore, which was the antecedent of the pericarditis, I confess myself unable to decide between these two last causes. Future observations may assist us.

So much for the chest affections; now for the abdominal. It was impossible to say, from direct evidence, when the stomach and liver disease commenced; it was long anterior to the man's entrance into hospital; and, judging from the known chronic course of these affections, they were probably anterior to all the rest.

The thickening of the splenic capsule was, as I mentioned before, much older than the slighter peritonæal inflammation which complicated the case just before death. Whether it would be correct to approximate its time of deposition to the pleural deposition, we have no means of saying. The times at which the intestinal ulceration and the peritonæal inflammation came on, I have already mentioned.

Such, as far as we can make out, was the order of succession of these lesions. What, now, was their relation to each other?

We may at once eliminate or put aside the stomach and liver disease as being affections, obviously not necessarily connected with phthisis; but as being in this case, as in many others, the result of causes altogether different from those which produce tubercle. Whether the influence they may have had upon the general health may not have augmented the disposition to tubercles, I do not know. At present there is no evidence of cirrhosis or granular liver exerting any action of this kind.

But all the other lesions were *probably* connected together. We may with certainty connect the pleural and the pulmonary exudation, the infiltration of the bronchial glands, the intestinal ulceration and the peritonitis. Probably we may join with these leisons the pericarditis and the perisplenitis. Now, with these facts we are prepared to make an induction. If our analysis of this man's case be correct,—if it be true that during this long illness one organ after another became affected in a manner which, allowing for the differences of local structure, was the same for all the organs, then we are irresistibly brought to the conclusion, that these successive diseases must have been but the local manifestations of a general constitutional disease. There must have been something deeper than these, some common basis on which they rested, some state which bore the same relation to them all. And in similar cases this state and basis, on account of the nature of its pathognomonic product, has been generally termed the "tubercular cachexia." Not the tubercular diathesis, for this means merely a disposition or proneness to the cachexia, and not the thing itself, which is no mere predisposition, but a positive and profound disease. How profound you will see in this case, in which, in less than two years, a succession of formidable disorders occurring in different parts of the body destroyed, in spite of all remedies, the life of this man. Now, this induction is of the highest importance. It opens to us a new field, a fresh inquiry, viz., as to the nature of this

* It is not absolutely the fact, that the dense cap at the apex is proper to phthisis; it will occur in pleuro-pneumonia of the apex.

common antecedent general disease, of this tubercular cachexia, as it was termed by Sir James Clark, whose sagacity first clearly indicated it.

To sum up, I read this case, then, in the following way:—In consequence of a profound constitutional disease, provisionally termed the "tubercular cachexia," a succession of local diseases occurred. Commencing in the apices of the lungs, or in the bronchial glands, and then probably engaging the pleurae, the pericardium, the capsule of the spleen, the intestinal mucous membrane, and the peritonæum, these diseases exhibited the common feature of the exudation of a foreign and unnatural substance into the normal tissues of the affected parts. In some of these it became more or less mixed up with the common products of inflammation; or such products resulted from or under the influence of the cachexia.

Such is my conception of the nature of this disease. But, if correct, you will at once see that it is erroneous to say, that this man laboured under phthisis pulmonalis, as if he laboured under nothing else. The lung affection was a phase, a type merely, a single feature, although certainly the most important one. We should use the term phthisis in such cases only as the title of the representative and most prominent manifestation of a deeper seated malady.

2. There are yet one or two points connected with this case to which I shall now allude; some other points we must subsequently take up. The tubercular cachexia has many different modes of showing itself. This particular case was characterized—1. By the great affection of the serous membranes—the pleura, the peritonæum, and probably the pericardium were all engaged. 2. By the character of the exudation, which, in the lungs and bronchial glands, assumed chiefly the fibrinous and the croupo-fibrinous forms of Gerber and Rokitansky, in the mucous membrane of the intestine assumed the lower, less organized, yellow, albuminous, or caseous form (forms which certainly often appear distinct, although I should mention to you, that Lebert, in his late work, denies the correctnes of the distinction.) 3. By the lingering character of the disease. This man lived till literally he had almost no lung to breathe with,—very different, indeed, from some cases in which a small portion only of the lung becomes affected before the patient dies, killed by a profounder general malady.

3. Another point about this case was, the extent to which the tubercular deposit was mixed up with the common products of inflammation. This was the case especially in the pleurae, where the exudation appeared to the naked eye to be entirely of the plastic inflammatory kind; in the lungs, too, around the cavities, evidently besides the compression of the tissue, inflammatory exudation matter had been thrown out. There are portions of these lungs which, if separated from the remainder of the organ, and shown to a person ignorant of the case, would be unhesitatingly referred, not to tubercle, but to chronic pneumonic consolidation; and this opinion, as far as that particular portion of lung was concerned, I believe, would be correct. In other parts, the tubercular derivation might have been guessed from the quantity of melanic deposit, which is uncommon to such an extent in chronic pneumonic consolidation. Again, in the pericardium and the peritonæum we had organizable fibrine thrown out, in addition to tubercle in the latter situation. What relation, then, had these two exudations, that of the tubercular cachexia and that of inflammation? Which preceded the other? Did the first formed stand in the relation of cause to the last deposited? The answer to this question will be more advantageously given at a future period; I may merely remark here, that in the case before us, almost all the facts point to the secondary character of the inflammatory exudation, to, in fact, its dependence upon the tubercular exudation. But let me here call your attention to this fact, that in this man, in whom the inflammatory products were so extensive, the tubercle itself was of the most organizable kind, and approached to the type of the plastic products of inflammation. At least this inference is, I presume, to be drawn from its hardness and indisposition to break down into its involution form.

ORIGINAL CONTRIBUTIONS.

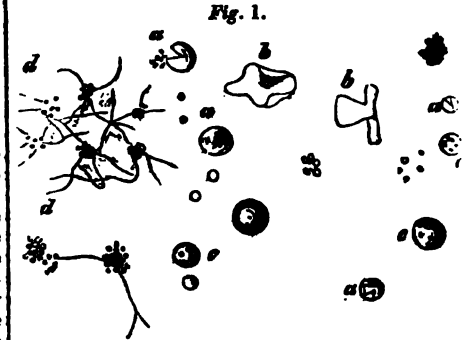
VESICLES AND TORULÆ IN URINE.

By SPENCER THOMSON, M.D., L.R.C.S.E.

From the recent excitement respecting the cholera fungi, the fact has become generally known that microscopic, vesicular, or cell-like bodies of varied size and appearance, are to be found in the secretions or excretions of the living animal body. The origin of these bodies is still matter of dispute. When they are found in the alvine discharges, many sources of doubt and fallacy must occur, which are absent when the urine forms the habitat of the fungi. In the latter case, when the vesicular or cell-like bodies are present, they must, of course, either be derived from within the body, or from spores deposited in the urine after its emission. The latter is generally thought to be the case; moreover, the progress of decomposition, and the development of the fungi, are generally classed together.

In the *Edinburgh Journal of Medical Science* for April 1848, I described and figured certain peculiar vesicular bodies observed in the urine of a scrofulous patient; since the above period, I have observed similar bodies (Fig. 1) in a few other specimens of urine, and, as before described, have observed them split in their peculiar manner (Fig. 1 *aa*) and discharge spores. After having fulfilled their office, the enveloping membranes of the ruptured vesicles could generally be seen lying in the fluid for many hours afterwards, but gradually disappeared, (Fig. 1 *bb*.) The discharged spores or granules evidently increased in size, but their progress varied; some gradually enlarged, became granular, (Fig. 1 *ee*,) and then split; others instead of growing, seemed to throw out and become connected by fibrous interlacement, (Fig. 1 *dd*.) In one case, a specimen of vesicles and discharged spores had been put aside in a watch-glass, under a glass shade—examined two days afterwards, both vesicles and spores had disappeared, and the whole fluid was occupied with vibriones.

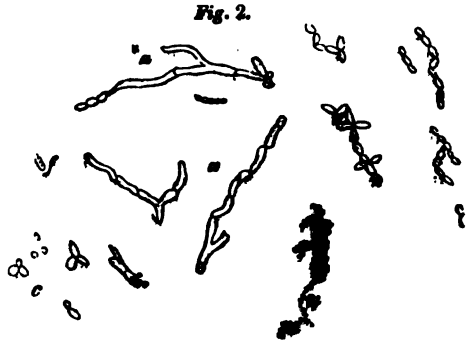
Fig. 1.



Whatever the nature and origin of these peculiar bodies, of one fact I am certain, they are not the product of decomposition; on the contrary, I have observed, both that they, and another form of vesicle to be presently described, are arrested in development, and disappear as soon as decomposition reaches a certain point; further, I have observed these vesicular bodies, which are always recognisable by their peculiar mode of rupture, fully developed, in one case, in fresh acid urine five hours after emission, and in another, within a quarter of an hour after. The occurrence of these circular vesicles has always been coincident with ardor urinæ.

In recent urinary observations, another form of fungoid growth has, in two cases, attracted my attention. When first observed, (Case 1,) it appeared in the form of oval cells, connected together lengthways (Fig. 2 *a*): intermingled with the cells were masses of minute granules (Fig. 2 *b*). The urine—that of a young man suffering from irritative dyspepsia, constipation, and much debility—was of sp. gr. 1033. Urea in great excess; not a trace of sugar; octohedra of oxalate of lime abundant. The oval vesicles were, for the most part, connected, when first seen, either in strings, or in triplets, or double (Fig. 2 *a—c*): in a day or two they separated, and a few torula looking growths were then, for the first time, observed (Fig. 2 *dd*). By this time many of the smaller granules had evidently increased in size, and many of the larger oval vesicles had become distinctly granular (Fig. 2 *f*).

Fig. 2.



In Case No 2, that of an aged patient suffering from general nervous atony and paralysis, the oval vesicles were, from the first, mingled with numerous torulæ (Fig. 3). In this case, the urine contained free lithic acid; sp. gr. 1017; not a trace of sugar. The torula tubes evidently contained well-developed vesicles, which, apparently, were separated by contraction and obliteration of the tube between each pair of vesicles (Fig. 2 *d**). (Fig. 3.) After standing for a few days, many of the vesicles became, as in Case 1, distinctly granular (Fig. 3), and began to bud out in various ways (Fig. 3, *aa*), the prolonged gemmæ also containing granules or nuclei, and progressing to assume the torula-like form. The above-described processes went on as long as decomposition had not advanced too far; as soon, however, as the urine became alkaline and ammoniacal, the process stopped, and many of the fungi disappeared. This effect was more particularly remarkable when the chemical changes were promoted by placing the fluid in a warm situation. In order further to test the matter, I dropped five drops of the urine containing the oval vesicles into two ounces of healthy, fresh, acid urine, kept in a corked phial; and, at the same time, five drops into a similar quantity of the same urine rendered alkaline by ammonia. In the course of a few days, both specimens of urine contained abundance of oval vesicles in various stages of development; in the acid specimen, the development was more advanced.

Fig. 3.

It is a fair inference from the above observations, that certain vesicles, cells, or fungi, do occur in the excretions of the animal body, totally independent of decomposition; and, indeed, dependent for their growth and development upon certain constituents (a) of the fluids, and that they can only continue to be developed so long as these constituents are unaltered by chemical change. Another fact is worthy of noticing; viz. that torulæ, distinct from, but which might be mistaken for diabetic torulæ, do occur in urine perfectly free from sugar.

I would direct attention to one fact connected with the circular vesicles first described, (Fig. 1;) the different forms of development assumed by the discharged spores; in one case, following the same course as the parent cell; in another, throwing out fibrous connexions; and in a third, giving place to vibriones. The last phase has appeared to me more worthy of notice, since I read in the *Medical Times* for November 24th, the account of the interesting observations of M. Guerin, on the "Transformation of animated blood corpuscles into vegetable mat-

(a) The urea and animal matters in the urine.

ter." Is the converse possible? Can the spore of the simple cell become, under certain conditions, the animated vibriæ?

ON "INGROWING" OF THE TOE-NAIL.

By HENRY J. M'DOUGAL, Surgeon,
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A paragraph, contained in the "Answers to Correspondents," in the *Medical Times* for March 2, induces me to forward the following case, which came under my notice more than two years since:—

A gentleman visiting London from the country was brought by a friend for my advice respecting the angle of the great toe-nail, on the tibial side of the right foot. He was quite unable to walk; and even resting any part of his foot on the ground caused intense pain. On examination, the toe was found slightly swollen, and with a reddish, erythematous blush extending up the foot. There was a very little fungoid granulation by the side of the nail, touching which was by no means so painful as pressure either on the under part of the toe, or on the upper and inner surface of the nail. The edge of the nail was quite invisible.

I directly proposed the usual operation of division of the nail in the centre, and eversion of the affected side. This had been proposed by two surgeons, whom the patient had previously visited, and was decidedly objected to. Being left to my own resources, therefore, I proceeded to scrape away, with an angle of glass, the inner surface of the nail (holding aside the flesh with the left hand) until its structure had become so thin that, with a pair of scissors, I was easily enabled to divide it for a short distance, and with forceps to lift out, the piece in the corner. This gave little or no relief, and I was induced to seek further for the cause of the pain and distress felt on touching the toe. A horny-looking surface filled the space from which the piece of nail had been removed; and, on scraping round this with the point of the scissors, I succeeded in turning out a hardened mass of collected epithelium scales, nearly as large as the seed of a sweet pea. The surface underneath was red, and secreted a sanious matter. Perfect relief ensued on the removal of this extraneous matter, and the patient congratulated himself on his own obstinacy in not consenting to the very painful operation of losing half his nail. A morsel of dry lint completed his cure in twenty-four hours, and a little occasional attention to the part has since saved him from further suffering.

I am not aware that the condition I have described above has been noticed by any surgical writer in our language, with the exception of Mr. Collis, of Dublin, who refers to it as only occurring on one side of the nail. I can quite conceive, however, that with a little attention many persons might be saved the exquisitely painful and barbarous operation now so often used, of tearing asunder the inflamed matrix, confessedly one of the most tender parts in the whole structure of man.

24, Henrietta-street, Cavendish-square,
March 4th, 1850.

HOSPITAL REPORTS.

ST. BARTHOLOMEW'S HOSPITAL.

CANCER OF THE PENIS.

A patient of Mr. Stanley's, suffering from cancer of the penis, was brought into the operating theatre, for the purpose of having the organ removed. The penis was enlarged, and extensively ulcerated, with copious discharge. The glands in both groins were hard and swollen. An elliptical incision was made around and at a little distance from the base of the penis, in order to remove as much as possible of the cancer, which appeared to extend under the healthy skin. The penis was then divided at its base. The corpus spongiosum and corpora cavernosa were found quite healthy in this part. The intention of the operation was not so much the removal of the disease, as to lessen annoyance and prolong the patient's life. The system had become too much affected for any local treatment to be of use, and the patient's constitution had suffered greatly, not only from the pain and size of the organ, but also from the discharge poured out from the large ulcerated surface.

TALIPES EQUINUS.

On the 9th, Mr. Stanley operated on two cases of club-foot. The first was that of a child about five years old, in whom it was congenital. The foot in walking was drawn so completely inwards that the child rested on its outer side, where the skin had become thick and hard. The second, a young woman, was also congenital. The ordinary subcutaneous incision of the tendo Achillis was made with a narrow bladed knife, the foot being at the same time held by an assistant in such a position, that the tendon was put strongly on the stretch. After the operation the feet could in both cases be readily brought into their proper position. The patients were then conveyed to bed for the application of the necessary apparatus to keep the foot at right angles with the leg, in order that the ends of the divided tendon might remain separate during the deposit of the fibrous tissue, by which the lengthening of the muscle is insured. The importance of close attention to this point was shown in the case of the last patient, who had been previously operated on, but without benefit. Mr. Stanley did not deem it necessary to give chloroform, the operation being slight, and almost painless. After the

AMPUTATION OF A FINGER

by Mr. Lawrence for necrosis, the result of inflammation of the fibrous structures, consequent on a slight scratch,

A FATTY TUMOUR

was removed by Mr. Lloyd from a man's shoulder, chloroform having been first administered. This case was interesting, not from the complaint or operation, but as showing the influence of chloroform in removing the sense of pain, even while the patient retains perfect possession of his mental faculties. When the operation was completed, he jumped off the table, with one or two of the sheets about him, and leisurely sat down to dress himself, apparently unconscious of what had been done. He not merely, by accident, roughly pressed off the lint, but dragged one of the sheets over the shoulder and naked wound, without showing any indication of pain. We have often seen patients removed to bed after an operation, when, though their senses would return, they remained many minutes free from pain, and, perchance, unconscious of that which had taken place.

TALIACOTIAN OPERATION.

The next case to which our attention was directed was that of a man who had lost nearly the whole of the nose, including the chief part of the nasal bones, with the cartilage and bones forming the septum. There had been no previous syphilis, as is usually the case in persons suffering from this deformity. The patient had lupus exedens three years since, when he was under the care of Mr. Syme, of Edinburgh, who was unable, for nearly two years, to stop the ravages of that disease. Some months after, Mr. Syme not deeming it yet safe to operate, the man came to London, and was admitted into St. Bartholomew's Hospital, under the care of Mr. Lloyd, who, judging favourably of the case, the patient was placed on the operating table in a semi-recumbent position, and brought under the influence of chloroform. An incision was made in the tissues, at the margin of the hole or cavity, beginning above, where a small portion of the root of the nose remained, and continued downwards, on either side, to the lower part. The size and shape having been previously marked, flaps were now taken from the adjacent parts of the cheek, and left adherent to the root of the former nose by a neck about the third of an inch in breadth. Mr. Lloyd did not judge it necessary to wait for the cessation of the hæmorrhage, but proceeded at once to unite the inner margins of the flaps, which fitted very accurately, by means of a fine continued suture. The lower posterior or outer angles were then secured, at a proper distance from each other. A needle, with a flat piece of cork, being passed through the posterior part of the flaps, another piece being also placed on the opposite end, served to press together the sides of the new nose, as well as to ensure the apposition of the posterior borders of the flaps with that part of the exposed surface nearest to the nasal cavity. A well-shaped nose showed thus far the successful result of the operation. The face was then dressed with dry lint.

Mr. Lloyd had twice performed this operation with very striking benefit to the personal appearance of his patients; especially so in the last case, a sketch of which was exhibited, which we promise soon to lay before our readers, with remarks by the talented operator himself. In the first, erysipelas took place, and a small portion of the tip of the artificial nose sloughed; the patient afterwards did well. One of these parties had twice suffered from syphilis.

In all cases in which this procedure is advisable, it is most important to wait until some time after all diseased action appears to have subsided, for the disease is very apt to return. There was a case of this sort under the care of Dr. Handyside, of Edinburgh, in which the lupus returned, but was, however, soon remedied.

This may be viewed as a more favourable case than the man operated on by Mr. Fergusson, as above detailed. In the latter, the flap was taken from the forehead, its neck formed by a cicatrix, and a half-twist was, of course, required, to place the skin on the surface. Thus there is a considerable danger of strangulation, and consequent sloughing. In the former, there was no twisting, and only such an amount of displacement of the vessels as would not interfere with a free circulation. Again, in Mr. Fergusson's case, a subsequent operation will be required on the twisted portion, as well as for the formation of a columna nasi.

With many it is a question, whether a nose composed of wax or other material, and kept in its place by spectacles, is not better than one of flesh and blood, created with no little risk to the patient's life. To this it may be answered, that the attendant danger is little, if at all, greater than that consequent on many less useful operations; and, though so handsome a nose may not be produced as that constructed by the artist, it sufficiently hides the deformity, without entailing continuous trouble,—a point of considerable importance, especially for the class who apply for assistance at our hospitals.

GUY'S HOSPITAL.

CANCER OF THE BREAST.

On Tuesday, the 5th, Mr. Hilton removed a large ulcerating schirrous mass from the left breast of a woman, aged about 45. He made an elliptical incision through the skin, around the tumour, which he then carefully dissected from the subjacent tissues. The substance of the pectoralis major did not appear affected, though its tissues were, to some extent, intermingled with the base of the tumour, and were, therefore, removed at the same time. The hæmorrhage was profuse, though soon repressed by ligatures and a compress of sponges. From the large extent of skin involved in the disease, the edges of the wound remained wide apart. There were no enlarged glands in the axilla, or swelling in any other part of the body. She had evidently suffered much from the pain and profuse discharge. We have given this case in support of the opinion before expressed, that, not only will the patients have a longer existence, but their remaining lives will often be rendered more endurable in consequence of the removal of cancerous matter. In Mr. Hilton's case the outward development of the disease was removed, at least for a time; in Mr. Stanley's it was considerably lessened in amount.

KING'S COLLEGE HOSPITAL.

TALIACOTIAN OPERATION.

On the 16th Mr. Fergusson performed the taliacotian operation on a man who had been admitted into the hospital for the purpose a few days before. It appears, that six years ago, about six months after he had received a severe blow on the nose, he was under Mr. Fergusson's care for necrosis of the anterior portion of the upper jaw, which was then removed. The abscesses healed up, and he remained well for two years, when the nostril became ulcerated, and several portions were dis-

charged from the septum and superior maxillary bone, the nose sinking for want of support. The disease continued alternately better and worse until fourteen months since, when that part of the frontal bone, situate at the base of the nose, exfoliated; the wounds soon healed up, and the tissues have remained sound up to the present time.

The septum, columna, nasal bones, incisor portion of the superior maxillary bone and nasal part of the frontal bone were wanting—the nose sunk into the nasal cavity, and of very small dimensions. The alæ and tip were perfect, the left being more depressed; the space between the eyes, hollow and cicatrised. A communication between the mouth and nasal cavity had remained since the bone in this part exfoliated. The man's general health was very good. The operation was commenced by an incision on each side of the nose, from the root to the alæ, the breadth of the raw surfaces being subsequently increased by paring the edges. A flap of skin was then dissected from the central part of the forehead, its shape being determined by a piece of leather previously fitted to suit the face and the irregularities of the organ, the opposite side being cut wider, on account of the greater depression of the left ala. The dissection was carried deep at the neck of the flap, which was formed by the cicatrix over the part from whence the last bone had been discharged, in order to render the vascular connexion more extensive. An opening was by this means made into the frontal sinus. The stalk was then twisted, and the flap brought with its edges into apposition with the raw surfaces previously made, and secured with three sutures on either side. The nasal cavity was stuffed, and wet lint applied over the wounds. The bleeding was arrested by sponging with cold water, previous to the application of the ligatures. The extent of the wound on the forehead was diminished by a suture at each corner. The subsequent history of this man is instructive, as illustrating an objection, though, as we think, a very insufficient one, which has been urged against this and similar operations. On the 18th he appeared very comfortable; a considerable portion of the nose had united by the first intention, and promised to form a well shaped appendage, and there was a free discharge of pus from the forehead. Three days afterwards erysipelas supervened, accompanied with violent delirium. The nose assumed a dull red colour. A strip of lint, smeared with collodion, was placed along the suture on each side; the nostrils were emptied and restuffed. The general treatment consisted in the free administration of brandy and ammonia, with beef tea. On the 26th his symptoms became improved. There was less swelling, and the redness confined to the left cheek; the wound in the forehead looked remarkably well, contracting and granulating healthily. The stitches were removed. The same night he became very violent and delirious. On the following day he had tetanic symptoms, consisting of pain in the masseteric regions, convulsive movements, sometimes very strong, of the arms and hands, with stiffness and contraction of the thumbs and two first fingers of both hands, deafness, but no apparent difficulty in swallowing. On the 1st inst. Dr. Todd saw him, and prescribed half a grain of morphia every four hours, nourishment being continued as before. Under this treatment he appeared to improve, having, however, occasional intermissions of violence. On the 11th he was a little excited, but understood what was said to him. When we saw him on the 13th he appeared quite rational; the forehead was cicatrising fast; the nose was well formed. The aperture into the frontal sinus still remained open.

STAPHYLORRAPHY.

Since Mr. Fergusson's suggestions for the improvement of the operation in cases of cleft palate were made public in 1845, numerous opportunities have been afforded of testing whether that which appeared an ingenious and useful suggestion, would prove equally good in practice. It consisted in the division of those muscles whose action tending to draw apart the two portions of the velum, not only rendered the operation difficult, but often interfered with its success,—their convulsive action interrupting the process of union between the pared edges. As it is now some time since these observations were published in this Journal, we will briefly recapitulate what were stated by Mr. Fergusson to be the actions of the respective muscles.

1. By the contraction of the levator palati the flaps are drawn upwards and to the sides.

2. The levator palati and palato pharyngeus acting strongly and together, the flaps are so forcibly drawn from the mesial line, that they can scarcely be distinguished from the sides of the pharynx. The palato-glossus will assist in retracting the flaps.

3. The circumflexus palati possesses but a feeble power in retracting the sides of the velum.

4. The edges come into contact when the superior constrictor muscle contracts, as during the act of deglutition.

On the 4th, Mr. Fergusson operated on a young woman with a fissure through the uvula and soft palate. On the 7th, Mr. Bowman performed a similar operation on a girl aged eighteen. Not merely were the uvulæ and soft palates cleft, but the palatine plates of the palate bones were absent, and a small portion of those of the superior maxillary bones, which gap was partly filled up with membrane. The operation in both cases was done as follows; chloroform not being given, as the assistance of the patient is in all these cases of much importance. The patient being placed on a high chair, and in a good light—an assistant steadying the head—the muscles were divided by a laterally curved bistoury; the velum having first been seized by a forceps to put the muscles on the stretch. The edges were then pared, the ligatures passed in the usual manner, and the bleeding restrained by iced water. We saw these patients a week subsequent to the operation, and found that in both the velum had perfectly united, leaving only a slight bifurcation in the uvula. Mr. Bowman's case was fed per rectum during the first few days. Other cases, which we have seen operated on in the same manner, have turned out well.

NORTH STAFFORDSHIRE INFIRMARY.

Ann Forrester, aged 18, servant, admitted Feb. 13, under the care of Dr. Wilson. She was of regular and temperate habits, but delicate.

About two months ago she was discharged, cured, from this Infirmary, having had a very severe attack of typhus fever. Her friends state, that since her discharge she has never been entirely free from pain in the bowels: this was sometimes so acute, as to incapacitate her from work. The pain was always aggravated by exertion and relieved by rest. On her re-admission, Feb. 13, she presented the following symptoms:—She was pallid, and very weak; her tongue was dry and furred, and her skin hot; her abdomen was tender on pressure; her bowels regular; she complained of pain in her limbs and head, and of loss of appetite. The catamenia were regular. Salines were given internally, and turpentine fomentations applied, as a counter-irritant, to the abdomen.

Feb. 14.—Has passed a good night; but still complains of uneasiness in the abdomen. Turpentine to be applied.

Feb. 15.—Is entirely free from pain; her appetite has improved; and she expresses herself as much better.

Feb. 20.—Continues improving; bowels regular, and all other functions normal. Vesperi.—Complains of a little tenderness in the abdomen.

Feb. 21.—Has passed a tolerable night; but at nine o'clock, a.m., is taken with intense pain in the abdomen, which is tumid, and very hard, but not tympanitic. Is collapsed; her pulse almost imperceptible. She craves for cold drinks, but cannot retain anything long on her stomach. She is perfectly sensible, answering questions readily. Her countenance is anxious, and more pallid than usual.

℞ Pulv. opii, gr ½ s. s.

℞ Enema calida aquæ.

℞ Hyd. chlorid, gr. ij; Pulv. opii, gr. ½ ft pil, 2 dis horis s.

℞ Fom. Terebinth. abdom. applic.

She retained the pills, and appeared, if anything, rather better.

2 p.m.—Constant vomiting has come on, of a dark tar-like fluid; the pain in the abdomen has increased. She moans continually, and complains of great thirst. She continued in this state till 9 p.m., when she died. She was quite sensible to the last moment.

Sectio cadaveris.—Fifteen hours after death, on cutting through the walls, the peritonæal coat of the intestine was much injected, but more especially on the right side in the iliac region, the ileum being covered with a thick coat of lymph, which was easily broken down with the fingers. A quantity of gruel-like fluid was found in the cavity of the peritonæum, more especially on the right side. On laying open the small intestine, the duodenal glands were enlarged, and the mucus coat rather injected, more especially toward the lower part of the ileum, where, in the neighbourhood, and among Peyer's glands, several ulcers were seen, one of which had penetrated the coat of the intestine, and had allowed the contents to escape into the cavity of the peritonæum, and caused the symptoms of peritonitis and collapse. These ulcers were, in all probability, generated during her attack of typhus fever, and were the cause of the constant pain which she was accustomed to experience in the lower part of her abdomen.

Feb. 26, 1850.

PROGRESS OF MEDICAL SCIENCE.

FRANCE.

[Paris Correspondence.]

DEATH OF PROFESSOR MARJOLIN.

This distinguished man, for many years Professor of Surgery at the Faculty of Medicine, died on Tuesday last, and was interred, with great pomp, on the following day. I had the melancholy satisfaction of attending his remains to their last resting-place,—melancholy, because he was one of my earliest and most respected instructors,—yet tempered by a feeling of satisfaction, because nothing could exceed the honours which were paid by every class of the Profession and the public to the memory of departed worth. Here, at least, personal merit ensures as much outward show of respect—to say nothing of unpurchasable regret—as in other countries is paid to peers and princes.

For the last twelve or fifteen years, M. Marjolin occupied the first rank as a consulting surgeon in Paris. His amiable disposition and kindness of manner had gathered round him a larger circle of friends than often falls to the lot of men in the position which he occupied. But I shall not dwell longer on these points, as I intend forwarding to you, next week, a notice of his life and professional labours.

The ceremony of interment was one of the most imposing which I have witnessed for many years. Indeed, I do not remember anything which can be compared to it, since the memorable funeral of General Lafayette. A Deputation of Medical Students followed close on the hearse. Then came the Professors of the Faculty of Medicine, in full official costume. The members of the Academy of Medicine succeeded, and a long *cortège* of the Profession, comprising every Medical man of any note, and nearly all those who aspire to future distinction, closed up the rear. A large military guard of honour assisted, with arms reversed and drums muffled. The sky was cloudless; the sun bright; and, as the immense train of followers marched along with uncovered heads—every one who passed likewise uncovering himself, according to the respectful custom here prevalent—a scene of surpassing interest was disclosed to view. All felt that the dead was honoured in a way worthy of the living.

The magnificent church of the Madeleine, in which the funeral service was performed, was crowded to suffocation, and thence the *cortège*, reinforced by an immense number of mourners in private carriages, wonnd its slow way along the Boulevards to the Cemetery of Père la Chaise, where discourses were pronounced by M. Roux, in the name of the Faculty; by M. Paul Dubois, in the name of the Academy; and by M. Larrey, as delegate from the Surgical Society.

ANNIVERSARY MEETING OF THE INSTITUT.

The Anniversary Meeting of the Acadamy of Sciences, held at the Institut on the 4th ult.,

was looked forward to with considerable interest; inasmuch as the progress of science during the last three years, was to be submitted to the judgment of the most competent authorities in Europe, and the authors of any progress which may have taken place, adequately rewarded. Let us then see, in the judgment of the Academy, what advancement has taken place in medicine, or the collateral sciences, during the years 1847-8-9, and through whom the progress has been effected.

MEDICINE, 1847-8.

Etherisation—Ligature and Torsion of Arteries—Phosphoric Necrosis—Composition of the Blood—Hysteria—Typhoid Fever.

Among many other bequests of the most munificent kind, M. Montyon left about 2,000*l.* per annum to the Academy of Sciences, for the purpose of remunerating, in an adequate manner, the authors of any remarkable improvement in public health, physiology, or medicine. The prizes taken from this fund are called the Montyon prizes; they often amount to 400*l.*, and are justly esteemed the highest honour to which medical science can aspire. They are, besides, open to the competition of all nations; and, accordingly, the claims of foreigners, always examined impartially, often obtain the palm.

These brief remarks will prepare you for the announcement, that the *grand* prize of medicine has been awarded to the discovery of Etherization, and divided, *ex æquo*, between Messrs. Jackson and Morton, of Boston. Of the justice of this reward there cannot be two opinions; for no one, I believe, will hesitate to acknowledge, that no discovery of equal importance has been made in medical science since the days of Jenner. In abatement of its value some may plead the fatal consequences which have occasionally followed the employment of the agent. On this point the Academy of Sciences expresses a deliberate opinion. It affirms, that the unfortunate cases are in infinitely small proportion to the immense number of successful operations. Thus, it may be fairly estimated, that 100,000 individuals at least have been submitted to the effects of ether or chloroform in various parts of the world, while the fatal cases have not exceeded twelve or fifteen.

MM. Roux and Velpeau have etherised, since 1846, from 1,000 to 1,200 persons, without a single example of fatal consequences being produced. Nay, more, they are rather inclined to conclude, that the new agent, when prudently applied, exercises a beneficial influence on the results of surgical operations.

With reference to the question of priority, which has been debated with so much animation between the partisans of the respective parties, the Academy announces that it has examined with scrupulous impartiality all the documents, and feels authorised to conclude, that Dr. Jackson discovered the physiologcal fact, while Mr. Morton first applied it to the practice of surgery. Hence, a prize of 2500 francs is awarded to Dr. Jackson, "for his observations and experiments on the anæsthesic effects produced by the inhalation of ether;" and the same sum to Mr. Morton, "for having introduced this method into practice."

ANEURISM.

Next to etherisation, ranks, in the judgment of the Academy, the researches of Professor Porta, of Padua, "on the Changes produced in Arteries by the Ligature or Torsion." One is astonished (say the reporters) at the prodigious number of dissections, in cases of human aneurism, which M. Porta has made, for the purpose of rendering his great works strictly practical; and there is hardly a single important point connected with this subject on which his labours have not thrown some light. Among the principal may be noticed,—"the proof of the fact, (already known,) that *new* vessels are formed after the ligature of a large artery, for the purpose of establishing a collateral circulation,—the demonstration that aneurism may be re-produced after apparent cure, and this by means of an active collateral circulation,—a most minute description of this collateral circulation after ligature of all the chief arteries,—and, finally, experimental researches on the circulation in the brain through the vertebral or carotid arteries, taken singly." M. Porta receives a prize of 2000 francs.

PHOSPHORIC NECROSIS.

Every one is acquainted with that little instrument of domestic convenience, a phosphorus-match, but few are aware that its preparation very often gives rise to serious disease in the workmen employed for the purposes of fabrication. The fact, that a peculiar species of necrosis, affecting both jaws, frequently attacked the workpeople in manufactories of phosphorus-matches, was first pointed out by M. Dietz, of Nuremberg. Since then, it has been ascertained that females are more subject to this curious malady than males, and young girls most of all. MM. Bibra and Gheist, of Nuremberg, have written a good work on the subject, and been rewarded by the Academy with a prize of 1000 francs.

MICROSCOPIC ANATOMY.

The work of M. Maude on this subject is so well known that it needs no eulogium. It has just been terminated, and the Academy deem the author worthy of an encouragement of 1000 francs likewise.

COMPOSITION OF THE BLOOD.

To complete their researches "on the composition of the blood in health and disease," MM. Becquerel and Rodier presented some time ago a new memoir on the composition of serum. They determined with greater precision than any of their predecessors the different quantities of albumen which the serum contains in different maladies. They showed how diminution of the normal quantity occurs constantly in certain diseases, while its augmentation is much rarer, and appears to be accidental. 1000 francs were awarded as an encouragement to the authors.

Finally, "encouragements," as they are here called, of 1000 francs, have beeen awarded to M. Landouzy for his work on Hysteria; and to M. Larroque for his treatise on Typhoid Fever.

PHYSIOLOGY: FUNCTION OF THE PANCREAS.

For the years 1846-7 no prize has been decreed. That of 1848 is awarded by the Academy "to the important and unexpected discovery of the function of the pancreas in the act of digestion." This discovery is due to Dr. Bernard, whose observations have proved beyond all doubt—such is the opinion of the Academy — that the function of the pancreas is to secrete a fluid which dissolves all the neutral fatty matters contained in our aliments. So completely is this power confined to the pancreatic juice, that, whenever the secretion of the gland is suspended, the fatty matters pass through the intestinal canal without undergoing the slightest alteration. In addition to the establishment of this important fact, M. Bernard has succeeded in explaining the nature of the function. It is one of a peculiar fermentation, analogous to that of the gastric juice. The Memoir of M. Bernard proves, in a most satisfactory manner, that the fatty matters are dissolved by means of a peculiar ferment contained in the pancreatic juice. This new material, which enjoys the property of rapidly turning every kind of fatty substance into an emulsion, can easily be obtained pure, and kept for some time without loss of the fermentive property.

MEDICINE, 1846.

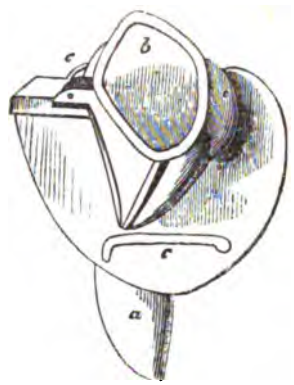
The annexed date shows that the Academy has fallen sadly in arrear with its labours; but the fault, it seems, must rest "with the political circumstances of the times," *to wit*, the Revolution of 1848. No less than twenty-six works, or manuscripts, were submitted to the Academy by competitors for the prizes of 1846. Of these, the *now* well-known treatise by M. Lebert, on Tubercle and Scrofula, is placed in the first rank. Next comes the Work of M. Roussell, on Pellagra. Having observed a few cases of this curious disease at the Hospitals of La Charité and St. Louis, and having learned that numerous cases had recently appeared in some of the southern Departments of France, M. Roussell betook himself to the South, thence to Italy, and afterwards to Spain, where he discovered that the disease, known by the name of "mal de la rosa," is identical with the Italian pelagra. The persevering labours of the author, and the light which he has thrown on a disease, whose nature has been little understood in France, appear to the Academy worthy of reward.

Following close on the above come the works of M. Pravas, "on Congenital Luxations;" of M. Roger, "on the Animal Heat of Children in Health and Disease;" and of M. Bourguignon, "on the Itch." This latter gentleman had the *complaisance* of allowing the interesting insects of scabies to find an asylum, as the Academy saith, in his own body for two years, in order to study their habits and occupations more completely. Such devotion merited and obtained its reward. Hence, to begin at the end, M. Bourguignon obtained a recompense of 1200 francs; M. Roger, one of 1200; M. Pravas, one of 1500; M. Roussell, one of 1500; and M. Lebert, one of 1800 francs.

The *Manesi* prize, of 1500 francs, was awarded to M. Bouchut, for the best Memoir "on Apparent Deaths."

FEEDING THE INSANE.

At the last meeting of the Academy of Medicine, Charriere presented an instrument which he had recently made, under the directions of M. Billoel, Physician to the Lunatic Asylum at Blois. The inconveniences which attend the use of œsophagus bougies, for compelling certain insane patients to swallow their food, are well known. Charriere's new instrument is simple, and appears to be free from the inconveniences alluded to. It consists of a shield-like plate of wood, pierced with an opening *b*, which represents a mouth. At the lower angle of the mouth-piece is a second plate *a*, horizontal, and slightly curved, so as to depress the tongue without injuring it. The posterior surface of the shield is so shaped as to close the mouth exactly, and the mouth-piece, *b*, is guarded by a trap which opens inwards, allowing a spoon, &c., to pass, but closing the hole at once when the spoon is withdrawn. The mode of applying this instrument is simple. The patient is confined with the straight-jacket, and the head held backwards by an assistant. The physician then slips the plate *a* between the teeth, and presses the shield against the lips; another assistant holds the instrument *in situ*, by the handles at *c c*. The spoon, &c., is now easily passed through the mouth-piece. Many insane patients, who had obstinately refused to eat, gave up all resistance after a few trials with this instrument.



SCOTLAND.

[Edinburgh Correspondence.]

CLINICAL INSTRUCTION AT EDINBURGH.

It was announced some time ago to the readers of the *Medical Times* who take an interest in Edinburgh affairs, that the Medical Faculty of the University had applied to the managers of the Royal Infirmary to afford some additional facilities for clinical instruction, in connexion with the University courses. After long deliberation, the managers have at last issued a minute of their decision on this subject. They have set apart a ward for the treatment of the diseases peculiar to women and infants, to the charge of which Professor Simpson has been appointed. Another ward has been set aside for the reception of males affected with skin diseases, to be under the direction of the ordinary Clinical Professors. They have placed the wards for mental diseases alternately under the care of the Clinical Professors and the senior Physician of the House, and they have appointed a resident clinical clerk on the same footing

with the resident clerks of the House Physicians. As respects the permanent wards asked by the Medical Faculty for the Professor of Systematic Surgery, the decision is postponed till the addition to the Surgical Hospital, now in progress, is completed; and this postponement involves no hardship, as the Professor is at present one of the ordinary Surgeons of the House, and his period of service does not expire till near the end of this year. With regard to the claim of the Professor of Anatomy to get wards for surgical cases, that is postponed *sine die*. The Lock wards, however, have been put on a footing, to render them more serviceable for clinical instruction; and when the addition to the Surgical Hospital is completed, wards are to be appropriated to eye diseases.

On the whole, then, though the Medical Faculty have not obtained all that they asked, they have yet succeeded in no inconsiderable degree — the points conceded tending in no small measure to the improvement of clinical instruction in connexion with the University. The effects of this improvement time will show.

A SURGEON'S DIPLOMA OBTAINED BY FRAUD.

A trial came on last Monday, before the High Court of Justiciary, which has been looked forward to by the Medical Profession in this neighbourhood for some time past with much interest. On that day the melancholy spectacle was presented of two respectable-looking persons arraigned at the bar on the charge of having obtained by fraud, in the name of one of them, a diploma from the College of Surgeons of Edinburgh. It appeared from the evidence, that one of them, William Duncan, in the year 1844, was practising at Amble, in Northumberland, and that the other, Alexander Cumming, acted as his assistant; that before that time Duncan had been often twitted with having no diploma, and that in the end of that year, soon after Cumming's return from a short absence, Duncan began to show about a diploma from the Edinburgh College of Surgeons. The diploma had been recovered by the authorities, and was produced in Court. It was in all respects regular, being granted in the name of William Duncan, and regularly signed, while it bore date the 4th of December, 1844. It was, however, proved that Duncan, on that day, had not left the neighbourhood of Amble. It appeared further, from the evidence, that, though Duncan had no diploma up to December, 1844, he had certificates of having regularly gone through the course of study required to qualify for the examination by which the diploma is obtained, and that Cumming carried these to Edinburgh, and, personating Duncan, was admitted to examination, and, having passed, obtained that diploma in Duncan's name, which was exhibited to the Court. It appeared from the evidence, that the candidate for a diploma from the Edinburgh College, besides exhibiting his certificates, is required to draw up a schedule of his whole course of study, which he authenticates with his signature, and that these schedules are preserved by the College, being bound up in volumes. Accordingly the schedule of study given in by Cumming, for the purpose of obtaining an examination on the 4th day of December, 1844, was produced in the Court, bearing the name of William Duncan, which signature Cumming was charged with forging. The charge of forgery, we believe, was departed from, but the evidence of fraud was complete.

The trial occupied the court between six and seven hours, several points of law being argued in the course of it. Among these was an objection to the competency of the Court to try Duncan, who had committed no offence in Scotland. The Court gave no decision on its own competency to try the whole case; but directed Duncan to be acquitted on a technical difficulty in the indictment. Cumming was, however, found guilty, and sentenced to imprisonment for one year.

IRELAND.

[Dublin Correspondence.]

The eminently practical character of our Irish School has been recently borne out by some new points on the subject of Syphilitic Sarcocele, by Mr. Hamilton, one of the men of the Richmond Hospital. The opportunities of investigation of this and similar diseases, at this Institution, by the Ricord of Dublin, poor Carmichael, have not been lost on his pupils and successors. The views, therefore, of Mr Hamilton, are of much interest. Under the very general term Sarcocele, every one is aware, is included several forms of Induration of the Testis; scrofulous and syphilitic enlargement, scirrhus, varicose swellings of various kinds, and even medullary fungus; nay, from the often contradictory things one reads, it would seem as if simple orchitis was also sometimes classed under the same title, the term being more properly limited, perhaps, to that flesh-like degeneration of the delicate tissue of the testis, the result of inflammation or constitutional diathesis. Mr. Hamilton considers there are two forms of syphilitic disease of the Testis,—*Simple Syphilitic Sarcocele* and *Tubercular Sarcocele*. From ordinary orchitis he distinguishes them by the co-existence of well-marked secondary symptoms, and from the gonorrhœal affection by the frightfully painful character of the latter. He says, it is a mistake to expect the evening exacerbation noticed by Sir Astley Cooper and Mr. Curling. The former, I need scarcely say, was among the first to draw the attention of the Profession to the disease. The testis and epididymis, as well remarked by him, will become four or five times the natural size, especially where you have the periosteal and cutaneous syphilitic affections. It is not common with sore throat; but with what we may call the more advanced forms of secondaries; and it obeys what he called the law of syphilitic maladies, "Evening exacerbation." This Mr. Hamilton has not seen. Hunter thought the disease not venereal at all; and Ricord, as well as his meaning can be got at, seems of opinion it is so often complicated with previous disease, that it is not easy to say if it be truly venereal or not. The signs of Mr. Hamilton's simple syphilitic sarcocele are, along with the ordinary ones, the very large size of the gland, its slow progress, generally attacking one testis, and never going on to suppuration, with some little effusion into the *tunica vaginalis*; —the constitutional symptoms, one or more of the familiar eruptions; Iritis and affections of the bones and throat. Mr. Hamilton says we have two remedies,—mercury in the earlier stage, and, when any amendment is perceptible, iodine. He does not agree with Sir Astley as to rest being indispensable; on the contrary, the patient should get about and into fresh air. The tubercular sarcocele differs somewhat. The organ has an uneven, hard, knotty feel; is attended with annular or serpiginous pustules, with crustaceous eruption, soft craniál nodes and caries. In *post-mortem* examinations of this melancholy form of the disease, the gland is found effaced by tubercular deposit. It is clearly a more formidable malady, and in the mode of treatment reversing, perhaps, the old plan, Mr. Hamilton is particular in sending the patient into the open air; getting up the system, as much as possible, by regimen; and, in the shape of medicine, administering little but the hydriodate of potash in minute doses, with everything calculated to assist it. Cod-liver oil, perhaps, would be of use.

SUBSTITUTES FOR COD-LIVER OIL.

This subject has elicited a highly interesting discussion in Dublin. Some specimens of "cod-liver" oil, and ordinary "train" oil, were lately exhibited at the Surgical Society, which few could distinguish one from the other—each giving the violet colour with sulphuric acid, hitherto considered characteristic of the more expensive oil. Dr. Bagot, who brought the subject forward, cited some cases in which he had exhibited the "train" oil with precisely the same effect as the "cod-liver" oil. He did not seem quite satisfied as to the exact source of "train" oil; but Dr. Jacob at once cleared up the difficulty, by showing that it comes from the great northern whale—the "basking shark," a common fish on the west coast of Ireland, yielding also an oil not very different. Even the cod oil of the shops, now all but a necessary of life for our fashionable folk, Dr. Jacob seemed to say, was got from several of the *Gadus* tribe, the hake, ling, &c.; in fact, all the oils were the same, and had the unmistakeable smell of the whale or "train" oil. In the course of the discussion it was mentioned, that among the Norway fishermen, the liver of the cod was found of great value in rheumatic affections, and there was only one period of the season at which the liver yielded the oil in a state of purity, leading to the obvious suggestion, whether the generative function had anything to do in the production of the still hidden principle, so valuable in many complaints.

Dr. Jacob spoke of compression as the best mode of obtaining the oil from the cells of the liver; an entirely different oil procured from the "blubber" of the whale, we should be on our guard against, and not confound with the oils from the liver. An oil got from the herring, from the fat of its mesentery and intestines was also different, but might yet be made available for medicinal purposes. The nature of the active principle of cod-liver oil seems very far from settled, judging from the opinions of the members—some looking on it as iodine, Geoghegan and Kennedy as some peculiar combinations of fatty matter, both perhaps being engaged. Of the value of the oil, every day's experience but more fully testifies; and the only dangers to be apprehended from substitutes, perhaps, would be, that the oil itself would fall into disuse; and, as before, in Lancashire, in 1776, it might become again merely a matter of curious history.

PARALYSIS OF THE BLADDER.

A very remarkable case of paralysis of the bladder, occurring after delivery, in the practice of Dr. Lane, of Coleraine, was read at the same Society. The enormous quantity of *six quarts* of urine were drawn off, the woman recovering.

THE COLLEGES.

Something of a novelty in its way,—a course of Clinical Lectures,—has been just commenced in Galway, from which we may, perhaps, with men like Doherty, look for some good result. The expected removal of the Lord-Lieutenant, however, has struck terror into all the ranks of Castle expectants. There is not any truth in the report, that a shower of mitres—baronetcies, we mean—is to descend before the event. In Galway, another institution has been recently opened to co-operate with the Colleges. Sir Robert Kane has written a clear and ample reply with respect to his tormentors at Cork College. In Belfast, matters go on as usual. One of the latest curiosities there, a lecture in the Greek language. At Old Trinity, some reports are rife of old Dr. Barker giving up the chair of Chemistry, full of years and honour.

INFANTILE PARALYSIS.

Dr. H. Kennedy has published a second Essay on this subject in the *Quarterly*, very worthy of perusal. It is intended to remedy a deficiency spoken of in the work of Rilliet and Barthez; now, by the way, in process of translation in an English journal. Dr. Kennedy's treatises are noticeable throughout for a deep acquaintance with his subject, and that discriminative industry that mark all the writings of this painstaking and zealous physician. We cannot quite agree with him, however, that the study of paralysis in the child is capable of throwing such a flood of light on the same disease in the adult; nor have we the same misgivings as to our want of knowledge at present of the physiology of the nervous system. If the physiology of any part of the system is well understood, and by Dr. H. Kennedy himself too, it is that of the nervous system.

MEDICAL CHARITIES.

The subject of Medical Charities in Ireland continues to agitate the public mind. Now, that Lord Clarendon and Sir William Somerville have been at head quarters, much is expected. It is to be hoped, the hospitals of Dublin will not suffer by any meddlesome interference; meanwhile, in the country parts, divers and sundry quarrels have occurred between the Board of Health and local Guardians; the authority of "W. H. Hopper" not meeting that official respect it should. In Ennis, a skirmish has taken place between the rival functionaries, and something very like a "Dutch auction" has been the result among the Medical men. Much to the credit of Dr. Cullenan, the chief physician of Clare, he is willing to forego his claim, if so doing will prevent the impounding of the salary of his rival. In Galway and other parts of the west, complaints are equally rife. In Cork the Dispensary has been kept on its legs mainly by the bounty of the Queen

when she visited it last. In Kilkenny the Guardians have thought 10s. a day too much for attending cholera cases, and have had a battle with the Medical men—in other places it is much the same. We would impress on the Government the necessity of at once stepping in, and doing something of a permanent character, it is the merest absurdity to have relieving officers posted all through the country, without the least connexion with the medical charities. One-half the medical expenses in England are paid out of the Treasury. Why not extend the measure across the Channel? The old idea of private subscriptions has become extinct in Ireland; and to allow the different Medical Institutions to dwindle away is at once a cruelty to the poor, so much dependent on them for assistance, and a piece of unfairness to a set of educated gentlemen, quite as intelligent as their more favoured brothers of the Church, and who have devoted their lives to the same irksome labours. In the new measure for remodelling Grand Juries, we see all the old absurdities continued. If this measure pass and nothing else be done, the dispensaries of Ireland will, in a few years, be among the recollections of its past history.

DR. GRAVES'S DISCOVERY.

Dr. Graves's communication to the *Irish Academy*, on the prevention of drought from evaporation in hot countries, has created a great sensation in scientific circles. Colonel Mitchell states, the only thing wanted in New South Wales to make it a prosperous country is some contrivance (which he looks on as quite desperate) to prevent the evaporation of the little modicum of water possessed by the colonists. Dr. Graves has unexpectedly hit on it. In Australia, Hindostan, Scinde, &c., the subject evidently requires but to be noticed to be properly estimated. In this country we have too much damp; but in the countries just named, where, day by day, the inroad of disease is marked by the failing stock of the poor settler's little tank, Dr. Graves's plan will come as a benefit of no small amount. Where the thermometer sometimes stands at 126° Fahrenheit, with a hot scalding wind, the suggestions of our eminent Irish Physician, if properly countenanced by people in power, will prove of immense value.

The details are simple. Where a piece of water, tank, pond, &c., is to be protected, as many pieces of canvass as possible are to be soaked in a solution of gutta percha, and placed over it,—if sewed together, so much the better,—a few pouches, or pockets, being all that is necessary to float them. *The water thus supports its own roof.* The idea every one must perceive is thoroughly original; and we trust to find Graves's solution of gutta percha soon as well known as Burnett's disinfecting agents, or Kyan's patent liquids.

SELECTIONS FROM FOREIGN JOURNALS.

REPORTS UPON PROSTITUTION IN BERLIN,

AND UPON THE REGULATIONS WHICH SHOULD BE MADE IN RESPECT TO IT AND TO SYPHILIS, FOUNDED ON OFFICIAL DOCUMENTS AND ADDRESSED TO THE MINISTER VON LADENBERG.

By DR. FR. J. BEHREND.

This reprint from *Henkes Zeitschrift für die Staatsarzneikunde*, in and by the present Editor of that Journal, although rather a verbose document, (extending over 300 pages,) is important, as indicating the unfortunate results which have followed the forcible suppression of all the brothels in Berlin, in 1846, and the means by which they may be best counteracted.

The exposition of these is prefaced by a very long historical sketch of the various police regulations respecting prostitution which have been adopted in Berlin from a remote period to the present time. These we can only very briefly advert to. Sexual delinquencies were, at an early period, very severely punished, and Fidicin, in his history of Berlin, relates examples of persons suffering decapitation for adultery as late as the end of the sixteenth century. Procurers and procuresses were committed to the flames at an earlier period. When a marriageable girl trespassed, she was compelled to appear at the court-house, when her head was shaved and covered with a distinctive veil, which she was obliged ever afterwards to wear. Widows, who indulged in copulation were similarly treated. All women of tainted character were forbidden to appear at the guild festivals, and the members of the Companies were obliged, before marriage, to submit the characters of their brides to scrutiny, and, failing to do so, were liable to expulsion and corporal chastisement. The object of all this was not so much the suppression of fornication (provided this were not committed with virgin, wife, or widow) as to draw a broad line of distinction between the moral and immoral, the good and the bad, members of society. Brothels were, in fact, from an early period (15th century) not only tolerated, but licensed, and resorted to very openly. They were confined to certain streets, and submitted to inspection. The women were compelled to wear a peculiar headdress, and were under the management of the public executioner, who was invested with full power of chastising them, and was responsible for their good behaviour. Sexual intercourse in any, save these licensed houses, was interdicted, and the culprits when detected were flogged and expelled the town. The priesthood seem to have been particularly considerate with respect to female frailty; and the author declares that the old Berlin burgesses regarded this body, as far as the chastity of the town was concerned, in just the same light as modern citizens do a garrison. At the time of the Reformation repressive measures were attempted to be resorted to, and marriage was insisted upon as a religious duty; but the disorders consequent upon the 30 years' war interrupted all proceedings of this kind. The women, too, were emancipated from the governance of the executioner, and a money payment was exacted in place of shaving their heads and clothing them in a distinctive dress. This laid the foundation to a kind of tax they have ever since been subjected to, which goes to form a fund for their maintenance while under treatment in hospital.

At intervals attempts were again made to do away with the use of the brothels, but with little success; and attention was then turned to the best means of regulating the practice. The oldest sanitary police regulation dates from 1700, prior to which time all the efforts were exclusively directed to the protection of public morals by this regulation, which continued unchanged for near a century; the keepers of brothels were licensed, and *chirurgi forenses* instituted for the periodical inspection of the inmates, and compelling their prompt removal to the hospital when they became diseased. The subsequent regulations are narrated in detail by Dr. Behrend; but we need not follow him through these. Such regulations have, however, it may be observed, assumed a somewhat vacillatory character, from the fact of the efforts having, from time to time, partially succeeded that were made by persons who believed the state did wrong in tolerating such establishments. In consequence of this they were partially suspended, always under the strong protest of the police, who indicated the ills which must and did follow the withdrawing these persons from their supervision. At last a great effort was made by the advocates of their suppression, what the author calls a fanatical crusade, was led on against them by a pious distiller of brandy; converts were made in the ministry; and, notwithstanding the prophesies of the police agents, the decree for the entire abolition of the brothels at the end of 1845 was put into force. Those of the girls who did not belong to Berlin, and who could not prove they had other honest means of subsistence, were despatched to their homes, or to places they indicated beyond the Prussian territory.

Some of the consequences of this step, which have been observed in the short space of time that has elapsed since it was taken, are set forth in the second section of the Report, and are developed in answer to certain queries:—

1. *Has prostitution increased or diminished since 1846?*—A statistical answer to this cannot be given, but there are many indications of its increase. Among these is the great increase of clandestine prostitutes, (*winkelhuren.*) Already, in 1839, when a partial suppression of the brothels took place, the number of these increased from 400 or 500 to 900, and in 1847 the police knew of 1250 notorious characters of this kind; and this is known to be only a fifth or sixth part of those who, under the disguise of some occupation, endeavour to pursue prostitution without exciting the attention of the police. For the purpose of pursuing their calling unmolested by the authorities, a number have contracted marriage, and are called sham wives, (*scheinfrauen.*) Altogether, the Author thinks the number of prostitutes in Berlin (with a population of 250,000 souls) may be fairly set down at 8000, this being the estimate of the Police-Councillor Hofrichter, who has paid much attention to the subject. Prostitution, moreover, instead of now being chiefly limited to certain well-known localities is spread over various parts of the town.

2. *Has syphilis increased since the suppression of the brothels?*—Hospital statistics supply unmistakeable evidence of this. Thus the number of women admitted to the Charité in 1838, were 634. Several brothels were then suppressed, and this increased to 728, 757, and 743 in 1839-41. It then diminished again, and in 1845 had reached the low figure of 514. The brothels were suppressed, and the numbers increased in the respective years 1846, 1847, 1848, to 627, 761, and 835. Moreover, these are far from expressing the exact amount of the disease so well as heretofore, since there is now no medical inspection and police regulation for forcing the diseased into the hospital. The male syphilitic patients also increased from 711 in 1845, to 979 in 1848. Moreover, the disease has increased in obstinacy and malignity, as may be seen in the facts, that the average duration of treatment increased, for the women, from 42 to 53 days; for the men, from 26 to 33 days; and for the two united, from 34 to 43 days. The experience of the garrison surgeons is to the same effect; for while, during eighteen months prior to the closing the brothels, there were 551 syphilitic patients, requiring 17,152 days of treatment, there were, in the subsequent eighteen months, 678 requiring 23,021 days. The fluctuating state of the garrison since this, prevents the exact proportion being ascertained; but the military authorities are loud in their complaints of the great extension of syphilis in the different regiments; and General Wrangel formally demanded, in 1848, the re-establishment of brothels under the strict supervision of the police. The results of the Author's inquiries among private practitioners are, that syphilis is much more prevalent now than four years since; that, owing to the great traffic now occurring by means of the railways, it has extended its ravages to small towns and villages, where it was hitherto of very rare occurrence; that it now frequently gains admission into families of the highest respectability; that it pursues a more lingering course, and takes on worse forms than heretofore; and that examples of unnatural connexion and onanism are far more frequent.

3. *Has the abolition of brothels exerted a beneficial effect upon the public morals?*—The increase of clandestine prostitution and other facts just adverted to supply some answer to this. Since 1846, procuresses seem to have driven a thriving trade, quite young girls, under twenty, or even under fourteen, being their instruments; but one of the most melancholy circumstances is the increasing profanation of the marriage tie among the lower orders. To escape the supervision of the police, girls of the town marry any man or lad who presents himself—generally convicts, thieves, or other dangerous characters—and, protected by these "guilt-hiders" (*schanddeckel*), as these husbands are called, they give themselves up to the most abandoned course, their abodes being the resort of the lowest criminals and a school of prostitution for quite young girls. These marriages only last for awhile, as long as the vices they have been contracted for can be advantageously pursued; after when, either on good terms or with blows, the parties separate, and consummate other marriages in other parts of the town for like ends. Nay, after each has in the interval contracted several marriages, the man and woman sometimes eventually come to live together again. So, too, amicable exchanges of wives or husbands are not infrequent.

The increase of immorality is also testified by the augmented number of *illegitimate births.* Dr. Behrend publishes the official lists of births from 1838 to 1849; and, dividing this space of time into three periods, we find that the proportion of illegiti-

mate to legitimate births is 1 in 7 in the first period, 1 in from 6 to 7 in the second, and 1 in 6 in the third period. Criminal abortion the author believes to be on the increase.

4. *Has there been any increase of public security obtained by the suppression?*—The police are loud in their denial of this; for as the brothels were well-known places of resort for criminals, they afforded them great facilities in apprehending these, betrayed as they usually were by the keepers, or other inmates. Treachery of this kind is no longer so easily committed, and discovery of crime consequently less frequent; while these low characters, by marrying the prostitutes, enable these to pursue their calling without disturbance by the police. Herr Heitz, chief of the protective police in Berlin, estimates, in 1849, its "dangerous classes" at 40,000; and he thus distributes them:—About 7000 professional thieves, robbers, and cheats, whose sole means of existence is the product of their crimes; about 8000 persons who have undergone punishment for ordinary crimes, and have in part redeemed their position, or have committed only very slight crimes; about 3000 persons who, having no certain occupation, regard the property of others with a dangerous eye; about 10,000 beggars, vagabonds, or homeless persons; and about 12,000 prostitutes.

In the concluding portion of the Report, Dr. Behrend suggests the remedies for this state of things, prefacing these with some account of the proceedings of other countries with respect to prostitution; but, as his information is only derived from the works of Parent, Duchatelet, Ryan, and others, we need not follow him; for the statistics on the subject are very uncertain, and, as regards London, the most ridiculously exaggerated statements have found credence. Thus, quoting from Ryan, (correctly or not we cannot say, never having seen the work,) he tells his readers we have from 70,000 to 80,000 prostitutes, to say nothing of the trulls about the docks and banks of the Thames. Moreover, there are 5000 gin-shops, taverns, and cigar-divans, at which these women congregate for the purpose of fornication. Procuresses bring whole troops of young girls from the country, who are disposed of for from 20*l.* to 100*l.* per head. Young girls, too, coming from school, are frequently abducted and forced to prostitution, their disconsolate parents seeing them no more! And yet this absurd stuff finds believers!

Dr. Behrend lays down the following propositions, by way of conclusions, deducible from the various facts his Report contains:—

1. Prostitution is an evil of society that can be prevented by no law or repressive regulation.
2. Although not preventible by legislation, yet ought it not to be left entirely to itself.
3. It should be placed under police regulation, so as to shelter society, as far as possible, from its evils.
4. The toleration of brothels is the most certain means for supervising and controlling it.

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THE MEDICAL TIMES.

SATURDAY, MARCH 16, 1850.

For the success of sanitary reform, it is necessary that its advocates should discriminate the double labour that lies before them. They have to consider both the past and the future. For the future they have to arrange the sanitary machinery, which cannot cease to play without entangling numerous victims in its fatal mesh. They have, on the other hand, to remove the ancient fallacies of times gone by, so that their new machinery may fairly and easily revolve. To make sewers, to supply water, and to admit air, is no difficult task on a virgin and unoccupied soil; but, when everything has been dealt with as if it had been determined that sewers should *not* be made, water *not* be supplied, nor air be admitted, it is no easy matter to adapt that plan which runs so easily on paper to the actual and rigid realities of the case.

Some few years ago, the Government determined to diminish, if possible, the evils arising from the close congregation of persons in St. Giles's. They attempted to accomplish this in the most unlucky way. They pulled down a number of small houses, and carried a large street through the centre of the "Rookery." In this street they built houses for people of the middle class; and, by so doing, took away from the poor class a certain number of tenements. Thence it resulted, that instead of destroying, they simply removed. What before had covered a certain number of acres, they compressed into a fraction of the space. They aggravated the evil they tried to remedy, and illustrated in St. Giles's the parable, in which an unwise reformation is followed by a sevenfold pollution. Obviously the only way of improving St. Giles's, was to build houses for its own class, not to build houses for the class who did not want them. If Government, instead of making New Oxford-street, which, as a speculation, is a complete failure, had built large model lodging-houses for the inhabitants of the Rookery, they would have constructed a splendid quarter where now runs an unsightly street, have lodged the poor in comfortable dwellings instead of jamming them into overcrowded hovels, and have saved many lives in the cholera epidemic, instead of filling with shriveled, ghastly, and expiring spectres, the wards of St. Giles's Workhouse.

In the last Article on "Our Sanitary Laws," we expressed an opinion, which was not formed without careful thought, that the first movement of Sanitary Reform in London should be, to re-build the poor and densely-thronged districts; which, we venture to say, as they now stand, *cannot* be sewered, *cannot* be supplied with air and water, and, consequently, *cannot* be freed from those "plagues and pestilences" which are now their almost constant occupants. If this be not done, Sanitary Reform will be partial and imperfect; it will disappoint its friends and advocates, and, by its failure, will impede this great Reformation in all parts of the civilised world.

The invocation of a clean, healthy, and magnificent city, from the midst of an ill-built throng of miserable hovels, is not so impracticable as might at first sight appear. There is nothing in the plan which can compare, in point of grandeur and extent, with the works of our great railways, or with the proposals for sewering the Metropolis which have been lately before the public. The interests which will be compromised, if any be compromised, are not so great; but, were they a hundredfold greater, they must not be permitted to stand in the way of this indispensable Reform. Besides, the interests which are supposed to be thus endangered, are, in reality, founded on an injustice, and have attained their present magnitude at the expense of persons who have not been in a position to protest against the wrongs from which they suffered.

We assert, that the present relation between landlord and tenant in our poor quarters is, in the highest degree, unjust and indefensible. For many years, a large and nefarious profit has been derived from the most inexpensive tenements, because the unlucky tenants have had no liberty of choice. There has been, indeed, a kind of Free-trade dealing, with this difference, that the two parties to the bargain were on quite unequal terms. The demand was great and the supply ready; but, as the buyers could not object to the quality of the article, the seller took care that no principle should guide him except his own immediate gain. In this way a fictitious value has been given to many properties, and it is not speaking too strongly to declare, that the gold which has passed into the pockets of the owners, has been wrung from men whose very life-blood was polluted by the pernicious sanitary influences which avarice and ignorance had gathered around them.

This condition of things cannot continue. The State which, in the case of factory women and children, has avowed its right of seeing that the weak shall not be crushed or injured by the advantage which the competition of labour gives to the millowner, cannot but consider the analogous case of the tenantry of the poor districts of London, who have been compelled, by the circumstances of the age, to accept their wretched dwellings without remonstrance and appeal. The next Sanitary Commission issued in London will no doubt condemn, as unfit for habitation, many houses which are now crowded with people, and which yield large yearly rents to their proprietors. Such a condemnation would not be a confiscation of property, it would be merely an act of justice; a taking away of unlawful gains. But if it be a confiscation, it is a needful one. Health and life depend upon it, and these are more valuable than rivers of gold!

It is not clear, however, that if large portions of the town were condemned, and were rebuilt in the manner proposed, that the property would not eventually increase in value. The model lodging-houses already erected, have, we believe, returned a good interest for the original outlay, although there was the drawback of the fictitious high value of the land on which they are built. But the vast space which their height gives, which almost concentrates a town in a single house, enables their owners to draw a hundredfold more profit from their land than the original Proprietor, with his small and frail houses, could ever attain.

The greatest difficulty in the way of the scheme would manifestly be the extreme division of property in some districts of London. In some parts every house has a different owner, or in a single house several persons have certain interests. Many such owners may be, and in some cases are of the lower class of tradespeople, who have invested the savings of a life in the purchase of this property. It might be impossible for such small proprietors to lay out money in the re-construction of their house, and, if able to do so, it would be almost impossible to make them act

in concert. Such difficulties can only be overcome by the personal intervention of the Government, who might, on fair terms, buy out gradually the old Proprietors, and might then constitute themselves the Regulators of the new model houses. Provided only that the public money were judiciously expended, the return for the original outlay might, in a few years, amply compensate for the temporary loss.

In attempting the purification of London, whether we at once commence to drain and sewer it; whether, as a preliminary measure, we attempt to improve the worst districts; or whatever scheme be adopted—and something must and will be done—it cannot but be anticipated that there will be a serious expenditure. If the Metropolis be well sewered, it can hardly be accomplished under two millions sterling. Therefore, under any circumstances, a great outlay must be made. Let us see that it is not made unnecessarily; that we do not repeat in London the fatal error of the Irish Famine, and commence public works, which accomplish only the conversion of precious gold into heaps of useless bricks and mortar, encumbering the ground they stand on.

In concluding this series of Articles on our Sanitary system, let us urge upon the Board of Health, who are the representatives, and should be the Directors of the Sanitary movement, the paramount importance of seeing that their first steps are placed on stable ground, and are turned in the right direction. The completest theory sometimes loses credit, by the imperfection of its working details, and that which includes in itself the highest truth, may be rendered useless by a fault of application. The Sanitary reformers may and will accomplish unparalleled results; but they have to overcome unrivaled difficulties. Let them call to mind those unequaled allegories which, in the poetic and sublime philosophy of the Greeks, represented the search of man after truth and wisdom. The hero yokes the fire-breathing bulls, gathers in the fatal harvest of the serpents' teeth, and carries off the matchless prize, because to strength and courage he joins the knowledge of the means, which can alone preserve him from the dangers of the quest. So it is with all great undertakings. We must not only see the centre of the maze, we must hold the clue which guides us to it. The difficulties which hinder the coming of a great good, or prevent the destruction of a great evil, are as the dragons and the labyrinths which, in the Greek fables, protected the golden fleece, or formed the refuge of the fabled Minotaur. But there have never been wanting men who, to zeal and industry, joined that knowledge and that tact which showed them how best their goal was to be reached. We doubt not that such men now exist, to whom must be entrusted the working out of this great movement of Sanitary reform, than which none has ever been proposed which promised to bring to the bulk of the nation more substantial and enduring benefit.

THE PRESENT ASPECT OF HOMŒOPATHY.

The distinction between pitiable ignorance and culpable quackery is often so slight, that we can hardly say where one ends and the other begins. And in the history of Medicine, a blind adhesion to a particular system has sometimes occupied a kind of neutral ground between the two, by turns simulating both. This ambiguity is still more remarkable in the case of that singular inversion of all medical knowledge which constitutes the Homœopathic theory; so much so, that it is scarcely possible to point out which of these, its two chief constituents, preponderates.

The doctrines of Homœopathy need no refutation. The statement which names the theory—the grave announcement that medicines act by producing effects similar to the diseases for which they are administered—may be safely left to the common sense of any man who can compare the results of the organism and of drugs—of processes of nutrition, and of pinches of powders. While the yet more astounding statement, that dividing the dose increases the power, or that causes produce effects inversely as their quantity, equally requires no comment.

After these preliminary remarks, our readers will, no doubt, be surprised to learn, that they are intended to usher in an article in praise of Homœopathy. But justice compels this tribute.

Had Homœopathy done no more than checked the over-zealous practice of amateur Physicians, it would even then have had some claims upon our gratitude. Thanks to it, the medical skill of the Ladies Bountiful of country districts is now comparatively harmless. Those tremendous purgatives, which even the "dura ilia messorum" could not withstand, are advantageously replaced by the mysterious but innocuous globule, which allows its fortunate recipient an unchecked recovery. The "twa simples" of Sir Walter's rustic Esculapius, "laudamy and calamy," are superseded, and exiguous molecules of arnica or saffron occupy their place. The edge-tools of the craft have been so blunted and dulled, that children and idiots may and do handle them with impunity. In short, unprofessional Medicine has been thus reduced to its proper limits, and is rendered alike harmless and amusing. So practised, it is indeed a pleasing and innocent recreation; and we sincerely hope that domestic Homœopathy may long flourish, sharing a divided but congenial sway with preserves, home-made wines, Berlin wool, crochet, sentimental ballads, and three-volumed novels.

But when such an absurd theory takes the garb of scientific Medicine, and adjudicates questions of life or death, it becomes necessary to consider it in a far more serious light. Yet even here, while we cannot help pitying the blindness of its consultants, and the vicious ignorance of their advisers, we may, nevertheless, find much that is instructive in the highest degree.

At present we hear little of Homœopathy in town. Doubtless it has numerous professors and supporters; but they scarcely exceed the average number of dupes which this large city affords to the pretensions of any imposture. The miraculous conception of Joanna Southcote, the skill of St. John Long, the pill of Holloway, the obtrusive treasures of Joseph Ady, and the antagonist sagacity of Sir Peter,—all find in this great metropolis a fair number of believers. In London, Homœopathy has enjoyed the proverbial day of the canine species, and now offers little to fear or hope.

But in many parts of the country this system has lately been introduced with great glory and some success; such success, that it becomes interesting to inquire into its cause.

It is almost a truism to assert, that none of our knowledge is altogether free from our error; none of our institutions from imperfection. And just as, in the latter case, the principles of reform are often at first carried beyond their ultimate limits; so in the former, a particular bias is often immediately corrected by an error in the opposite direction. As in the parallelogram of forces, the path of real progress is the diagonal of the two.

In pursuance of these reflections, we unhesitatingly affirm, that both in Medicine in general, and those localities in particular, Homœopathy seems to be a reaction against some error of our Science. It has been well remarked, (we believe in one of Dr. Forbes's Reviews,) that there is much reason to fear the natural history of disease has been greatly overlooked. And we are justified in adding that, in many instances, a treatment by excessive bleeding and purgation, which involved tedious illness and a slow convalescence, has been set in disadvantageous contrast with a no-treatment by Homœopathy, and a consequent speedy recovery.

But while we may lament that a system, which is based on either gross ignorance or unqualified falsehood, should have been selected as the agent of our correction; while we fear that, in many of the graver maladies, its inaction will cause, as it often has caused, fatal results, we may still take some comfort from observing, that it is likely to enlarge our views of pathology, to point out our errors of treatment, and, in this way, to be of real and permanent service to mankind. And, although Homœopathy may be a temporary discomfort to an already underpaid Profession, it can never seriously compete with legitimate Medicine, much less can it destroy a system which is sustained by knowledge, and full of the vitality of truth.

DISSOLUTION OF THE CONFERENCE, AND THE PROCEEDINGS OF THE COLLEGE OF SURGEONS.

We are entering rapidly upon a new era of medico-political agitation. Events transpire almost more quickly than the hours. The last of one series of transactions is the first of another, and the same fact that concludes the history of the past, pronounces the prophecy of the future. It was thought that the letter of the Council of the College of Surgeons, declining to accord the right to examine in Surgery to the proposed College of General Practitioners, was final; not so, it was the initiative to other measures which have issued in other finalities, themselves the precursors of a new order of events. In one sentence, the *Conference of Delegates, meeting at the College of Physicians*, is dissolved; and at the moment we are writing, the Council of the College of Surgeons are debating upon the principles of a new measure to be submitted, with all possible haste, to the Secretary of State! Thus we have arrived at another crisis.

Sir George Grey, no doubt exceedingly irate at the provoking inconsistency and bad faith of the Council of the College of Surgeons, has demanded from that body a distinct and final declaration of what they intend or desire to do, both as respects the rights of their own members, and the reconstitution of the Profession at large. The missive from the Home Office has thrown the Council into a sudden and unexpected perplexity; for most men, especially gentlemen in office, have feelings similar to those of Sir John Falstaff, and do not like to give "reasons on compulsion." Whilst the Council were at liberty to fence with plain propositions, and wriggle out of promises, they were well satisfied with the part they played, and disported themselves as nimbly as the eel in his own slimy element. Circumstances have changed. The Council are obliged at last to be explicit, and it is probable that before many days have elapsed, we shall be able to acquaint the Profession with the privileges meditated for them by their generous benefactors in the Royal College of Surgeons.

We hope that the Council of the College will be deeply penetrated with a sense of the responsibility now imposed on them, and will endeavour to repair by a last noble act the incalculable wrongs they have, through a series of fifty years, inflicted on the Profession. Condonation awaits them if they will be true to the interests of the injured and degraded members. Let them now prove that our suspicions in respect to their equity and favourable dispositions were groundless, that our predictions were false, and we shall be happy to give them an amnesty for all their past errors and crimes. If they now resist the call that is made upon their liberality and sense of justice, if they resolve to hold tenaciously by their exclusive privileges, to cast off the great bulk of their members from all corporate connexion, to defy their just demands, and to insult their intelligence and respectability, we shall not cease to arraign the acts of this obstinate Council, and to direct our censures against every proceeding they may take in neglect of, or in opposition to, the real interests of the College. The Press will in the end beat the Council; and they may be assured that the more pertinacity they now show, the more profound will be the humiliation to which they will eventually be compelled to submit.

THE DESPOTISM OF THE POOR-LAW BOARD.

We were disposed, at the establishment of this Board, to look favourably upon its acts, and to regard with indulgence many proceedings which appeared exceptionable, but which could not be proved to emanate directly from this body. Undeniable facts at length compel us to revoke every expression of good-will, and to tell the Poor-law Surgeons, plainly and unreservedly, that they were never presided over by a more arbitrary and unjust Board than the present Poor-law Commission. We have thought highly of Mr. Baines, as a man of enlightened mind, of liberal views, and large sympathies; but whatever merit he may possess as an individual, we must not be blinded thereby to his public acts; and whether he be unjust by choice or compulsion, by his own free judgment or by the dictation of his superiors, we are called upon to pronounce our unqualified condemnation of his policy as often as it may be inconsistent with equity, or with his own direct professions.

Among other matters, an inquiry has been recently going on respecting certain accusations of mismanagement against the Board of Guardians of the Croydon Union, and especially with regard to the alleged excessive expenditure in the workhouse. We will pass over the charges foreign to medical duties, and come at once to the accusations brought against the Medical Officer of having been too profuse in his allowances of wine, beer, spirits, and extra articles of diet to his patients. After commenting upon the excessive expenditure resulting from the liberality of the Medical Officer, "the Poor-law Board points out, that, *in all cases*, the authority of the Medical Officer is *subordinate* to that of the Guardians, and that it is, therefore, incumbent upon the latter to resort to necessary control whenever he may appear to fail in the exercise of a sound discretion."—*Times*, March 11.

The subordination of the Medical Officer to the Guardians, in the treatment of his patients, is one of the evils of which Union Surgeons have long complained, as being the cause of cavils and dissensions with the Local Boards, and of a constant anxiety to the Medical Officer, by rendering abortive, in many cases, all his efforts to cure disease, and thereby entailing prolonged suffering, destitution, and premature death upon the subjects of his professional ministrations. Beer, spirits, and extra diet, are ordered by the Surgeon, in the belief that aliment is required more than drugs; and there can be no doubt that, in many instances, the Surgeon is right. Humanity and Science equally enjoin upon him the duty of ordering the administration of such beverages and diet when, in his conscience, he may be convinced that they are peremptorily required by the condition of his patient. To give a Board of Guardians the power of refusing such orders, is to confer upon them an authority over the Medical Officer in the medical treatment of his patients,—a power, indeed, which the Poor-law Board expressly tells them that they possess, and ought to exercise; for it declares, that the authority of the Medical Officer is, *in all cases*, subordinate to that of the Guardians. The Medical Officer, therefore, can be little more than an ornamental superfluity of the Poor-law Staff.

We protest, in the name of the Poor-law Surgeons, against this arbitrary and cruel order; and hope that the majority of the Board of Guardians of the Croydon Union will treat it as it deserves, and not harass and pain their Medical Officer by thwarting him in the exercise of the only power which, in many instances, can be effectually employed for the assuagement of suffering and the saving of life.

This is not, however, one of the most flagrant instances of despotism and illiberality on the part of the Poor-law Board. As the March quarter is coming round, there has been an attempt made, sometimes by the Medical Officers, and at other times by the Guardians, to revise the Surgeons' salaries; and in ALL cases that have come to our knowledge, the Poor-law Board has not only assented to, but has actually advised a REDUCTION of the already niggardly salaries paid to the Medical Officers. Yes! the Poor-law Board has, in some instances, even refused to receive the recommendations of Boards of Guardians to raise the salaries of their Medical Officers, and has instructed the Guardians to cut down the salary instead of increasing it as they had proposed. We have been assured that this has been the case in the Whitechapel Union, and counsel of the same kind has been given to the Guardians of the Holborn Union; but we hope, by-and-by, to have the facts connected with these transactions before us, when the Union Surgeons may depend upon it that we shall not fail to exhibit the conduct of the Poor-law Board in its true colours.

TO THE GENERAL PRACTITIONERS IN MEDICINE, SURGERY, AND MIDWIFERY.

GENTLEMEN,—From an advertisement just issued by the Council of the National Institute, I perceive you will very shortly be called upon to make a public demonstration of your opinions upon the important question of Medical Reform. It, therefore, behoves every one who has the interest of his Profession at heart, carefully to examine the subject of Medical polity, and speedily to come to some conclusion in his own mind as to what course he ought to pursue in the present important crisis of Medical affairs. I can assure you that there never was a period in the recollection of the present generation of Medical men, when calm and attentive consideration was more imperatively demanded from all and each of you than at the present moment. Upon your judgment, discretion, and, above all, upon the tone and mannner in which you make your claims known, will depend entirely your future position, and the professional and social status you may hereafter be able to maintain. There is little doubt, but that a Medical Bill of some kind or other will pass the Legislature during the present session of Parliament: all parties agree in this, that the legislation of Medical affairs can no longer be delayed; and it depends entirely upon yourselves, who constitute at least nine-tenths in number of the entire Profession, and who have considerably more than three-fourths the practice in your hands, whether you are to have any voice in the settlement of this important question, or are to be handed over *en masse* to the joint superintendence and control of the existing Institutions; and, by a stringent Act of Parliament, and for at least the next twenty years, are to be *nailed* down as the subordinates of the Pures of the two Colleges. Now, gentlemen, it is high time to inquire, whether you are prepared to assent tacitly to an arrangement that will deprive you entirely of whatever power you now possess, under the Apothecaries' Act of 1815, by which you can at any rate sustain and uphold your curriculum of study, and exercise, to a certain extent, uncontrolled power over the examinations of your own class,—are you prepared, I ask, to surrender these most important, and to you vital, privileges, into the hands of those whose interests and inclinations must inevitably tend to make the line of demarcation between your Professional rank and reputation and their own, as widely distinct as it is practicable or possible? That some such scheme as the one I have mentioned will be attempted—and that without consulting the worthy magnates of the Hall—I have but very little doubt; and it depends entirely upon yourselves, and the attitude you assume at the forthcoming gathering, whether, if attempted, it may not prove completely successful. Many circumstances combine, at the present moment, to afford great chance of success for such a bold stroke of policy. The Government, heartily tired of the question, is anxious to settle it on any terms. The Conference Committee, that has been

sitting so long at the College of Physicians, has virtually, if not absolutely, broken up without coming to any arrangement, and the recent Manifesto of the Council of the College of Surgeons, settles the question completely as to how far they are disposed to recognise the just claims of the members to a fair and honourable enjoyment of their rights in their own College. A plan, something of this kind, would also find favour from its bearing some resemblance to the arrangements in force in Scotland; and the authorities north of Tweed may possibly be induced to support such a proposition, on the specious plea of assimilating the institutions of the two portions of the kingdom,—specious in its fullest sense, for attempting to assimilate institutions to states of Society so utterly and unalterably dissimilar. Still, gentlemen, it is not only possible, but highly probable, that a scheme of this kind may be attempted, and I now warn you, that its greatest chance of success consists, not from any of the causes I have enumerated above, but from the disunion, distrust, dissensions, and general indolence and apathy of the General Practitioners themselves. I therefore tell you again, if you have any wish to prevent such a consummation, you must be prepared, one and all, without any halting, to merge all former differences, and to state, fearlessly and temperately, though with proper determination, what it is you require for the due protection of your own class, and to state explicitly what arrangements, as respects the General Practitioners, you consider would best secure their full competency and efficiency for the important duties that, in every part of the kingdom, they are called upon to perform.

Without attributing "absolute wisdom" to the National Institute, in all points of its past policy, I cannot withhold my cordial approbation of their zeal, perseverance, and great discretion, in the management of a very complicated question, under circumstances of considerable difficulty, with a host of enemies in their front, and far from a hearty or cordial support from their friends. Recent events have fully proved their great foresight, in expecting nothing from the College of Surgeons; and their tactics in so pertinaciously adhering to their scheme for a new and independent College, as the only effectual means of counteracting the narrow-minded policy of the Council of the College of Surgeons deserves the commendation of all classes of Medical Reformers. The Institute has, through good report and evil report, steadily adhered to the opinion, that a distinct and independent College for the Medical men engaged in general practice, would best effect what ought to be the main object of all Medical legislation, namely, the providing a sufficient supply of efficient and well-educated Medical men to meet all the requirements of public and private practice. Now, gentlemen, the best—I may almost say the only—security that the future General Practitioners would be able to stand this test of complacency, and to maintain themselves creditably in public estimation, depends upon their having some power and control over the education and examination of their own class, and this control can only be satisfactorily obtained through the medium of an institution founded upon the principle of representation, and that does not repudiate the practice of midwifery and Pharmacy by its members, or degrade them by penalties, if they practise these most important branches of a medical man's duties. Many additional advantages of great importance would also result from the incorporation of the General Practioners by Royal Charter, in a College of their own,—professorships in the various departments of the medical and collateral sciences, might be founded in connexion with a new institution, a code of medical ethics might be framed, that would by *authority* improve and regulate the *practice* of the Medical Profession, thereby affording every inducement to its numerous members, to avoid and condemn malpractice of every kind, and by avenues to posts of honour and emolument being thus opened to men of worth and erudition, they would be the more anxious to be considerered deserving of the confidence of the public. Gentlemen, as I have before observed, I think the National Institute deserves the highest credit for having advocated these views; and I conscientiously think that the general Practitioners, both in town and country, ought to, and that they will, cordially support the Council in the course they have taken.

In conclusion, permit me to remark, that I do not recommend you to agitate for "the One Faculty Scheme," not because I am unwilling to admit that it is in theory sound, and also that it has many able and reflecting men as its warmest advocates, though not a great many of those are engaged in general practice. Provincial doctors and pure surgeons are the chief of the One-Faculty "Men;" no bad reason why the General Practitioners should watch narrowly any scheme strongly recommended in that quarter. But I disapprove of the General Practitioners wasting their energies in seeking an "Utopia." The temper of the Legislature is decidedly adverse to any levelling scheme whatever, no matter to what it refers: and I am sure they will not entertain any one in Medical Politics that would tend to the overthrow of the existing Medical Institutions, whilst a safer and equally useful course of proceeding was open to them. I therefore would advise you to reflect a little upon this subject between this and the aggregate meeting.

I remain, Gentlemen, your sincere well-wisher,

A General Practitioner of Twenty-five Years' Standing.

CONVENTION OF POOR-LAW MEDICAL OFFICERS.

SUPERANNUATION-FUND BILL.

The Bill drawn for a proposed Fund for Poor-law Officers, having made no provision for the Medical Officers, surprise and dissatisfaction have been expressed by many, more especially by those who have devoted a great part of their years to toilsome, ill-requited attendance on the poor. This feeling grew stronger, from the fact, that the Clerks of Unions were embraced in the operations of the Bill,—a class of gentlemen eminently awake to monetary interests, yet, like the Medical Officers, devoting only a part of their time to the obligations of the Poor-law appointments.

A meeting, to consider the subject, was held, by advertisement, at Mr. Bainbridge's, St. Martin's-lane, on the 18th ult. On that occasion, Mr. Bainbridge stated, that he had examined a draft of the Bill which had been drawn out by the Poor-law Board, an abstract of which he submitted to the meeting. "Medical men," he said, "were excluded from participating in the advantages of the Bill, the objection being, that they were elected annually, and had private practice; but these were not valid objections." After some discussion on the clauses, a Committee was appointed, consisting of Mr. Bainbridge, Mr. Leonard, Mr. White, Mr. Hutchinson, Mr. Evans, and Mr. Hooper, to wait on the Convention of Poor-law Medical Officers, and "make arrangements, if they thought it desirable, for a public meeting on the subject."

On the 28th ult., the Committee of the Convention had the pleasure of receiving the Deputation as proposed. Mr. Bainbridge ably urged the leading points of the question, setting forth, in addition to the other hardships of the Medical Officers, the slight and grievance of their being excluded from the benefits of the Fund; since in no other way could officers of a certain standing get so good an annuity as even by paying up arrears, and thus qualifying for the advantages of the Fund. The want of permanency of office was admitted to be in some instances a difficulty, but not an insuperable objection; and it was proposed to meet it by a clause, whereby an officer, on removal or resignation, might retain a part of the advantages which would have arisen to him from the Fund, on the maturity of his service. Mr. Bainbridge finally requested the co-operation of the Committee to the end, that the Medical Officers might also be included in the provision of the proposed measure; and suggested for consideration, whether a Deputation to the Poor-law Board, or convening a General Meeting of the Union Surgeons, would be most desirable.

Dr. Hodgkin, the Chairman, stated the result of the interview which the Committee had recently with the Poor-law Board, and that the subject had then been pointedly brought under notice by Mr. Ross, who had suggested to the Commissioners, that the provisions of the Superannuation Fund might be rendered available to the Medical Officers at their discretion or choice. Mr. Nicholls, the Commissioner, answered, that such a view had suggested itself to the Board, and he promised that consideration should be given to the subject. Dr. Hodgkin dwelt upon the importance of the Deputation co-operating with the Convention in their endeavours to obtain a mitigation of the general grievances complained of by the Poor-law Medical Officers. It was argued against compulsorily joining the Fund, that so long as Guardians could dismiss, at their pleasure, the Medical Officer, his having contributed to the Fund would prove another fetter on his independence; that many professional men attached to Unions would object to a *forced* deduction of salary, although only at the rate of two-and-a-half per cent., for the purposes of the Fund; that in some Unions, the election of officers was by *rotation;* in others, at least annual, and many surgeons held only small sections of Unions, which produced salaries too insignificant for annuity purposes.

Much important conversation ensued, in which the Deputation took an active part. Attention was specially drawn to the question of a transfer of "Medical relief" from the Poor-law Board to the General Board of Health, in favour of which, the Committee had received many letters from the country. It was noticed, that should this change take place, a Special Superannuation Fund might be formed, and permanence of office secured, in the Act which would authorise the said change of administration, and probably blend the duties of Union surgeon and officer for sanitary purposes.

The Deputation having expressed confidence in the proceedings of the Committee in their advocacy of the interests of the Medical Officers, it was resolved that the further consideration of the subject be deferred to the following week, and that the Deputation be requested to again attend on the occasion.

At the adjourned meeting of the Committee, which took place on Thursday last, it was resolved:—

1. That owing to the want of permanency in the appointments of the majority of the Poor-law Medical Officers, and the small amount, in many instances, of their salaries, it is the opinion of this Committee, that it will not promote the interests of the Union Surgeons to be compelled to subscribe to the Superannuation Fund; but they consider that the Bill should provide a permission for any Union Surgeon to join the said Fund, should he think fit.

2. That so soon as a Bill on the subject is actually before Parliament, the Committee will call a general meeting relative thereto, should the provisions alluded to in the foregoing resolution not be embodied in the said Bill.

Mr. Bainbridge and the gentlemen forming the Deputation being introduced, pursuant to the invitation given at the last meeting, were informed of the above resolutions, which were considered by them well calculated to further their immediate object for the general good of the Union Surgeons, and expressed their satisfaction at the ready co-operation given by the Committee, and at the unanimity resulting from the interview.

Charles F. J. Lord, Hon. Sec.

4, Hanover-square, March 11th, 1850.

MANCHESTER COMMITTEE ON MEDICAL REFORM.

TO THE RIGHT HON. SIR GEORGE GREY, BART., HER MAJESTY'S PRINCIPAL SECRETARY OF STATE FOR THE HOME DEPARTMENT.

Sir,—The Manchester Committee, appointed at a public meeting of the Profession, to watch the progress of the Medical Reform question, beg respectfully to represent to you the dissatisfaction which they feel at the late proceeding of the Council of the College of Surgeons of England.

They refer to a communication which has recently been addressed by the Council to the National Institute of Medicine, Surgery, and Midwifery; wherein the intention is expressed of maintaining a continued opposition to every proposal for such a modification

of the constitution of the College as shall admit Surgeons in general practice to its governing body.

Upon this subject, the Manchester Committee would submit to you, that such a determination is directly at variance with the wishes and feelings of the great body of Members of the College. They would further urge, that in any modified Charter that may be conceded by the Crown, the restoration of harmony between the Council and the Members can only be accomplished by the spirit being carried out of certain suggestions which the Manchester Committee submitted to the Council of the College in the month of January last.

The propositions which were submitted to the Council for Manchester comprehended two sets of circumstances relating in the first place to the Fellowship of the College; and, secondly, to the constitution of the Council and the character of its examinations.

Upon the subject of the Fellowship the Committee would observe, that all members of the College having, prior to the Charter of 1843, enjoyed equal rights and privileges, were dispossessed of the same by the mode in which the provisions of that Charter were carried out.

A very small minority were selected from among the members arbitrarily, and without any fixed principle, and in the new grade thus constituted all the power and influence of the College were made to inhere. The Committee do not attach any value to the Fellowship as now proposed to be conceded to members of twenty years' standing, on payment of a fee of ten guineas, seeing that the members elected to that distinction, under the provisions of the late Charter, were called upon to make no such payment. Any admission to the Fellowship, upon terms less favourable, must continue the distinction which the Committee hold to be both unjust and invidious.

They would submit, that if the Council of the College of Surgeons were constituted, in part, of Surgeons engaged in general practice, the education of the great body of the Profession might very appropriately be regulated by the College, in such a manner as to render any demand for a third College perfectly gratuitous, the Manchester Committee viewing every such proposal with the greatest possible distrust and dislike.

In conclusion, the Committee would urge upon you, that in any advice which you may tender to the Crown respecting a new Charter to the College of Surgeons, you will defer to the wishes and feelings of the great body of its members, rather than to the representatives of the interested, and, for the most part, self-elected few, who constitute its present Council.

Signed on behalf of the Committee,
W. Watson Beever, Chairman.
Manchester, March 5, 1850.

[AUTHENTIC.]

REPORT OF THE DEPUTATION TO SIR GEORGE GREY.

The Deputation appointed by the Conference of Delegates had an interview with the Right Hon. Sir George Grey, Bart., on Monday, 4th inst., for the purpose of representing the wishes of the General Practitioners in reference to Medical Legislation, in conformity with the following resolutions:—

"1st. That should the answer of the Council of the College of Surgeons be unfavourable, the same Deputation do wait on Sir George Grey, to urge upon the Government the importance of an immediate incorporation of the General Practitioners into an Independent College, and the passing an Act of Parliament to settle the question of Medical Reform.

"2nd. That the resolution, empowering the Deputation to wait upon Sir George Grey passed at the last meeting of the Conference, be acted on, and that a letter be written to Sir George Grey, requesting him to appoint a time to receive the Deputation."

The Deputation consisted of Mr. Clifton, Vice-President of the National Institute, Mr. Bowling, Mr. Ancell, Dr. Webster, Mr. Bird, Mr. T. Heckstall Smith, (St. Mary's Cray,) Mr. Southee, (Cambridge,) Mr. Hood, Mr. T. Morton, (Reigate,) Mr. Bottomley, (Croydon,) Mr. Propert, and Mr. Ross. (Hon. Sec.)

Sir George Grey was attended by the Lord Advocate, the Chairman of the Special Committee of the House of Commons which took evidence upon the subject of the Laws and Charters governing the Profession in the Sessions of 1847-8.

Mr. Clifton, Vice-President of the National Institute, as Chairman of the Deputation, stated, that the Deputation was appointed by a Conference of Delegates from various Medical Reform Associations, that had been convened for the purpose of obtaining unanimity of opinion with respect to the principles of any new measure of Medical Legislation. There were some members of the Profession who supposed that it was yet possible to acquire full possession of corporate rights and honourable status in the Royal College of Surgeons; and, in order to meet the wishes of this portion of their brethren, a Deputation had been appointed to wait upon the President and Vice-president of the College of Surgeons, to ascertain whether they could accede to any terms that would open that College to the Profession. The Council had returned an answer, by letter, to that inquiry, which letter had been already transmitted to Sir George Grey, who would see that the Council rejected every proposition that could be considered satisfactory, and even went to the extent of seceding from the "Principles for a Bill" that had been agreed to at the College of Physicians. It appeared, therefore, that the College of Surgeons was the sole impediment to a final settlement of the Medical question. Under these circumstances, the Deputation begged to urge the propriety of establishing an independent College for the General Practitioners, as the only means left of placing that highly important and useful class of Medical Practitioners in the position due to their scientific acquirements and social estimation.

Mr. Clifton then read the resolution cited above, as the authorisation of the Committee; whereupon the Lord-Advocate inquired whether the Deputation still adhered to the "principles" as finally resolved at the Conferences at the College of Physicians, as it appeared to him that the application made to the College was a departure from those principles.

Mr. Clifton explained, that the National Institute entirely adhered to the principles as unanimously agreed to by the resolution of the 2nd of May; but the College of Surgeons had repudiated those principles, although their own delegates had been parties to the resolution that confirmed them. The application to the College of Surgeons had been made, in concert with other bodies, for the purpose of conciliation and union, and was, by no means, intended by the National Institute as any compromise of the principles of the arrangement to which they had been parties.

Inquiries having been made respecting the support the principles would be likely to receive from the Profession at large, and to what extent the National Institute might be considered as representing the General Practitioners, it was further stated by the Deputation, that, by calling a Conference of Delegates, the National Institute had done all in their power to collect the sentiments of the Profession at large upon the subject, and that this numerous Deputation, appointed by that Conference, contained only one gentleman who held opinions not in harmony with those of the Council of the Institute; —that it would be impossible to obtain an absolute uniformity of opinion upon a subject embracing so many conflicting interests; and it might, therefore, be assumed, that the Principles for a Bill would, if carried out, give very general satisfaction.

Mr. Bottomley here remarked, that the gentlemen whose opinions he represented desired that the College of Surgeons should be re-constituted as the head of the Profession.

The Lord-Advocate then threw out the suggestion, that it might be possible to assimilate the Profession in England to the circumstances that obtained in Scotland, and, he believed, in Ireland also; and that the Colleges of Physicians and Surgeons might be constituted the sole corporate bodies for the examination of candidates and regulation of the affairs of the Profession.

The Deputation stated, that the interests of the governing bodies in those two Colleges were adverse to the interests of the General Practitioners; that hitherto it had been their policy to keep down the education of the General Practitioners to a low standard, and that the present high standard of acquirement of this class was due mainly to the laudable efforts made by the Society of Apothecaries. That the formation of the Order of Fellows by the College of Surgeons threw an impediment in the way of such an arrangement as had been proposed, since it not only required a lower amount of qualification on the part of the member, but also degraded him from his legitimate position in that College The General Practitioners could have no guarantee that their standard of qualification would be maintained, and their general respectability and usefulness promoted, unless the power of arranging the education and examination of candidates for admission to their order were retained in the hands of their own class in the Profession.

The Lord Advocate admitted that no such change could be effected without making the General Practitioners free to all the honours and offices of the respective Colleges. That, in fact, by such an arrangement, the General Practitioners could have no existence as a separate class in the Profession.

Sir George Grey then stated, that he was in communication with the College of Surgeons for the purpose of ascertaining more definitely their views upon the subject, but that he was not at present in a position to adopt any final measures, especially, also, as it did not appear that the Profession were themselves agreed.

The Chairman of the Deputation expressed a hope that, before any further steps might be taken, the General Practitioners might be informed of the views of the Government, and be admitted concurrent parties to any legislative proceeding.

Sir George Grey replied, that at any rate they would be informed of any future proceedings.

The Chairman having thanked Sir George Grey for his courtesy and kindness on this, as on all other occasions, the Deputation retired.

[We particularly request the attention of our readers to the above report, since an account of the Deputation appeared last week in a Contemporary, which has all the appearance of, if it was not in fact, a fabrication.—Ed.]

REPORTS OF SOCIETIES.

WESTMINSTER MEDICAL SOCIETY.

February 23, 1850.

Dr. Murphy, President, in the Chair.

Dr. Murphy, on taking the chair, thanked the members for the honour they had conferred on him in electing him their President,—an honour he highly valued, as being the collective expression of the same kind and generous feeling he had experienced from them since he had joined the Society. He alluded to the changes about to be made in the constitution of the Society, which would render his tenure of office uncertain; but added, that while he was their President, he would exert himself to the utmost to maintain the high character which the Society had attained under its late President. He must, however, claim their indulgence on that score, as the exertions of that gentleman had rendered the office a very arduous one.

A vote of thanks was presented to Mr. Hird, the retiring President, and to the retiring members of Council.

Dr. Routh narrated the case of a lad, subject to convulsions from early childhood, who, while playing last Christmas, swallowed a piece of bone, which Dr. Routh exhibited. (It was part of the frame of an eye-glass.) This was followed by cerebral symptoms, and, subsequently, by bronchitis and hæmoptysis; which got better under the treatment adopted. A day or two since he vomited about a pint of matter and blood, and brought up the foreign body at the same time. He is now going on well. Dr. Routh could not discover where the foreign body had lodged; the bronchial symptoms were not sufficiently severe to warrant the conclusion that so large a piece of bone was in one of the bronchia. He rather thought it lay in the œsophagus.

Dr. Garrod read a paper on the connexion be-

tween gout and rheumatism, of which the following is an abstract. He observed, that

Many physicians consider gout and rheumatism as diseases so closely allied as to be merely varieties of the same; others, as differing essentially from each other; while a third set believe that, although well-marked attacks of acute gout differ widely from those of acute rheumatism, yet that the two diseases may, as it were, imperceptibly merge into each other, or that in a given case it may be impossible to diagnose between them. The object of his paper was to ascertain which of these different views was correct. Dr. Garrod first pointed out the differential diagnosis. Gout is a disease of advanced age; rheumatism of youth. Gout is more common among men; rheumatism affects both sexes alike. Gout, at first at least, attacks the plethoric, and those who live high; rheumatism generally the debilitated from any causes. Gout is frequently hereditary; rheumatism, if at all so, incomparably less so than gout. The exciting causes also differ. Gout is induced by high living, by certain indigestible food, or by local injury, in those strongly predisposed; cold is the principal exciting cause of rheumatism. The rich are more subject to gout; the poor to rheumatism. Gout frequently presents premonitory symptoms, affecting the digestive organs, which is not the case in rheumatism. Gout attacks the small joints; rheumatism the larger. In gout, one joint, generally, only is affected; in rheumatism, many. In gout of long standing the large joints may be attacked, and also more than one; sometimes again, in rheumatism, the smaller joints are involved. In both diseases, the affection of the joints is accompanied by pain, redness, and swelling; but in gout, the pain is generally more severe, and the redness and swelling greater than in rheumatism. In gout, we have œdema and subsequent desquamation, which do not occur in rheumatism. The fever in gout is proportioned to the local inflammation; but it greatly exceeds it in rheumatism, and there is frequently profuse sweating of an acid character. Metastasis rarely occurs in acute gout; and, when it does, the brain or stomach suffers, the heart seldom or never; in rheumatism, the heart is frequently inflamed, and the secondary affection becomes the most important. Chronic rheumatism is more frequent than chronic gout; the latter is frequently accompanied by the secretion of a milky fluid, which constitutes chalk-stones or tophaceous deposits. Their composition is peculiar, consisting almost entirely of urate of soda, and sometimes phosphate and carbonate of lime. In the fluid state, the needle-like crystals of the urate of soda can be readily detected under the microscope. They are met with on the joints of the hands and feet, which they distort and even dislocate, also in and around the sheaths of tendons, and even in the cancellous structure of the heads of the bones. (Specimens, one weighing 2 oz. when fresh, were exhibited.) Colchicum possesses an almost magic power in relieving the pain in gout, but is not attended with such marked benefit in the acute form of rheumatism.

There is, however, a class of cases, in which even with the utmost care, the diagnosis cannot always be made. These are called rheumatic gout, and it would seem either that the patient suffered from both diseases at once, or that the two merged into one. Dr. Garrod considers it a matter of great interest to ascertain the true nature of these cases, and to find out whether or not cases of true gout and those of rheumatism may not present similar, and almost identical symptoms, and yet in their real nature be quite distinct. In a paper read before the Medico-Chirurgical Society, Dr. Garrod proved the existence of uric acid in the blood; in the healthy fluid traces of it only could be found, but in pure gout it was greatly increased, so that from 1·000 grains of serum it could be crystallized and weighed. It could also be procured in the form of urate of soda. This is not the case in acute rheumatism, as in that disease no more uric acid is found than in the healthy fluid. This, then, forms a marked difference between the two diseases. Uric acid, in Dr. Garrod's experiments, was abundant in the blood in cases presenting symptoms of true gout; deficient in those of well-marked rheumatism. This he used lately as a test of the two diseases. A labourer being admitted into the hospital with a complaint in one hand, which had been previously treated as rheumatism, but presenting characters of gout, as Dr. Garrod supposed, he directed a small quantity of blood to be drawn, and discovered uric acid abundantly in it. The man afterwards said he had had a similar attack in the toes, and that he could at any time bring on an attack by drinking beer freely. The plan for detecting uric acid in the blood, detailed in the paper read before the Medico-Chirurgical Society being very difficult, Dr. Garrod recommends the following as being more simple:—He takes a small quantity of blood, say from half an ounce to one ounce, in a wide tube or small glass, and allows it to remain for some hours to separate into clot and serum. The serum is then decanted, and ʒss. to ʒj. put on a watch glass, then acidulated with 5 minims of acetic acid, and a fibre of hemp from a piece of linen or tow introduced. In about forty-eight hours, when the serum has become solid from evaporation, if uric acid be present, the fibre will be covered with its crystals in the form of rhombs; an idea of the amount of uric acid present may be obtained from the number of crystals. (A drawing of the fibre covered with the crystals was exhibited.) That these crystals are uric acid can be proved by adding a little water, when, by care, the fibre can be removed with a small pair of forceps, with the crystals adhering to it. Nitric acid and ammonia will at once determine their nature, by the production of the mureside or purpurate of ammonia. Dr. Garrod then mentioned, as an indication of gout, the presence of chalk-deposits in the ear, a sign he has often observed. Sir C. Scudamore gives the tophaceous deposits, as being only 10 per cent., but Dr. Garrod has met with them in the ear much more frequently, so much so as in chronic cases to form a valuable sign of diagnosis. He has himself often diagnosed the disease from this mark alone, and found his opinion confirmed afterwards by the discovery of uric acid in the blood. In many chronic cases of gout, the condition of the urine will aid the diagnosis, as when there are tophaceous deposits, the kidneys appear to have lost the power of excreting uric acid, so that the urine is at all times free from lithic deposits. When the chalk stones are forming very freely, he has often found that not 1-100th of a grain of uric acid was eliminated in the urine in the twenty-four hours. At the same time he urine may present an acid re-action.

Dr. Daniell remarked, with respect to the non-utility of colchicum in rheumatism, that he believed it had failed hitherto because it was employed at a stage of the disease when it was clear that it could not be serviceable. He had never found it of use in acute rheumatism, unless its exhibition were preceded by bleeding, or by other antiphlogistic measures.

Mr. Barlow complimented Dr. Garrod on his paper, which, he said, was a most admirable contribution to the history of gout. It was of a character to preclude criticism. With reference to the diagnosis between gout and rheumatism, in respect to affections of the joints, the small ones were frequently involved in the disease in rheumatism; it was not always, as the author said, the small joints in gout, and the large in rheumatism; but a single one in gout, and several small ones in rheumatism. The great value of the paper consisted in its chemical facts; the want of power in the kidney to eliminate the uric acid is very important, as is also the occurrence of tophaceous deposits in the ear, which, as far as he (Mr. Barlow) knew, had not been alluded to by any other author. He would ask Dr. Garrod if he had noticed that gouty persons were especially liable to apoplexy? He had known several such cases, and his experience was confirmed by that of other practitioners. He agreed with Dr. Garrod in his opinion as to colchicum; it acted like a charm in gout, but was far less efficient in acute rheumatism.

Dr. Webster's experience did not coincide with that of Dr. Garrod respecting colchicum; it was, he thought, a very valuable remedy in acute rheumatism in young plethoric subjects, but was ineffectual, and often injurious, in the asthenic form of the disease. This may, perhaps, account for the difference of opinion as to its utility in rheumatic diseases. It was the same in cases of gout; in the chronic disease, occurring in old people, we should be cautious as to its use or its repetition. There is a great difference in the mortality from these two diseases: according to the Registrar-General's Report for the last year, there died, in London, 41 of gout, and 1100 from rheumatism. Gout, although so common, is by no means a fatal disease; neither is it as common as it used to be: it is scarcely known now among the Court of Aldermen of the City of London—(laughter)—this is owing to improved habits of living, &c.

Dr. Snow wished Dr. Garrod had gone more fully into the reasons why the kidneys in gout did not separate the lithic acid, but left it in the blood, and thus induced a fit of the gout. He had told the Society they were unable to eliminate it, but did not say why so. Gout is generally looked upon as a constitutional disease. He (Dr. Snow) presumed the uric acid remained in the blood, for want of a something; say, ammonia—to combine with. Mr. Gray had informed him, that the phosphate of ammonia had been found very useful in gout; if his idea were correct, it would explain the operation of the salt. He had found half a drachm of the wine of colchicum every four hours very serviceable in treating acute rheumatism with great inflammatory action in robust countrymen. It caused free catharsis and vomiting. The disease was sometimes thus cured, but it occasionally relapsed, and required calomel and opium.

Dr. William Ryan remarked, that there are some forms of rheumatism in which colchicum may be given for ever without benefit; but, when the cases are properly selected, it may be said to have, as Dr. Garrod had said of it in gout, a magical influence. Among agricultural labourers in his union practice he had given it pretty extensively, and in many cases with the most satisfactory results. When such persons, generally of robust constitution, are severely attacked by rheumatism, with excessive pain, redness, and swelling, and effusion is rapidly taking place in the joints, colchicum may work wonders. He (Dr. Ryan) has found all these symptoms greatly relieved by it in twenty-four hours; the pain being subdued, the effusion arrested, and absorption commencing. In these cases there is generally biliary derangement, and the colchicum must be given in tolerably large doses, as five grains of the powder every six hours, or a drachm, or drachm and a half of the tincture. The desired effect is not obtained, unless the biliary secretions are well acted on, and copious biliary black stools obtained. It may be given with Epsom salts, or calcined magnesia. This treatment will often prevent the necessity for bleeding, and render convalescence more speedy. He had never seen any danger follow the use of colchicum.

Dr. Ross, of Madeira, had not personally experienced any benefit from colchicum in gout, until he combined it with the bicarbonate of potash and morphia. Every joint in his body was affected. He had also taken the Vichy waters with benefit. He had received great advantage from a lotion of colchicum, morphia, and vinegar, applied to the affected joints. There was not any uric acid in the urine, until after his visit to Vichy, and then it was abundant.

Mr. Gray, in the course of a long, rambling speech, stated, that it was Dr. Edwards who recommended the phosphate of ammonia in gout, which he (Mr. Gray) had found to be a very efficacious and valuable remedy. He had met with tophaceous deposits in the ear, and also in the prepuce, years ago. He believed that, in gout, the kidney was inflamed, and therefore unable to separate the uric acid. The liver was also affected, and generally hardened.

Dr. Lankester thought that the presence of uric acid in the blood in gout, and its absence in rheumatism, was not sufficient to make them distinct diseases. It was also requisite to show, that they required a distinctly different treatment. In rheumatism, the lithic acid was eliminated, and poured out with the excretions; in the other disease, it was not excreted, but was retained in the blood. This, he thought, was the only difference between the two. He asked if there were any evidence as to the chemical action of colchicum in aiding the elimination of uric acid. He believed that it was serviceable in gout, by doing that; but he did not know that it could do so more efficiently than any other excretant. Papers have been written to show, that alkalies alone can cure both gout and rheumatism. He had given the phosphate of ammonia a trial, but had not found it of much service in gout.

Dr. Garrod, in reply, commented on Dr. Lankester's unwillingness to accept the presence or absence of uric acid in the blood as showing that gout and rheumatism are distinct diseases. He added, that in the fully developed disease, they differed entirely from each other; there was no relation between gout in the great toe of a strong man, and acute rheumatism complicated with endocarditis. Patients may pass enormous quantities of

uric acid without being affected with rheumatism. They may do so in diseases of the liver, or the latter stages of phthisis, or in enlargement of the spleen. In these cases there is no uric acid in the blood, which is found there in considerable quantity in gout only. Apoplexy is common among gouty subjects. He was at a loss to explain why the kidney could not excrete the uric acid. Dr. Snow had asked, if there were any local disease. In acute gout, the kidney loses the power, temporarily, to a great extent, of excreting the acid; but, after a few days, there is a copious excretion of it, and the fit passes off. This may recur from time to time; then, after a few years, the deposit in health becomes much less; the urine, at last, is almost clear, and then gout is always hanging about the patient. Dr. Garrod then mentioned a case of an open wound, which excreted the urate of soda, and concluded by reiterating, that colchicum is not so serviceable in rheumatism as in gout.

CORRESPONDENCE.

CAUSTIC IN STRICTURE.

[To the Editor of the Medical Times.]

SIR,—Mr. Courtenay's letter in the last Number of your Periodical, in which he asserts that I had, unjustly to himself, claimed a priority in recommending the revival of the use of the potassa fusa in the treatment of stricture of the urethra, obliges me to request your insertion of the following statement of facts:—

On the 15th of February, 1840, as can be seen by referring to the *Lancet* and *Medical Times* of that date, a paper was read by me at the Westminster Medical Society, on the Treatment of Stricture of the Urethra by the Potassa Fusa, when I particularly stated that it was only after twelve years' experience of its good effects that I ventured to recommend the use of the caustic alkali in that disease, well knowing that a very strong prejudice then prevailed against the use of caustic of any kind in urethral obstructions. I also endeavoured to define, with some degree of precision, the particular kinds of stricture in which the potassa fusa had appeared to be most useful; it being then, as at present, far from my intention to recommend its use in all cases indiscriminately. I called the attention of the Society particularly to the great value of the caustic alkali in the treatment of impermeable strictures, observing that, had it not been for its efficacy in such cases, the Profession would never have been troubled with any remarks of mine upon the subject. To Mr. Whately, I then, as upon every other occasion, when the treatment of stricture by the caustic alkali has been discussed, ascribed the entire merit of originality. I, at the same time, stated that experience had convinced me that the remedy might be advantageously used with much greater freedom than Mr. Whately had employed it, having, in fact, been frequently disappointed in the relief of impermeable strictures of long standing, when using the small quantities of potash recommended by that gentleman. The first edition of my work on Stricture, containing the result of my experience regarding the effects of the potassa fusa in that disease, was published on the 23rd of November, 1840, at which time, the first edition of Mr. Courtenay's work on the Treatment of Strictures by the Potassa Fusa had not been published, although, in his letter to you, he has the modesty to state, that it had appeared many years before my publication on the same subject. In the preface to his first edition, published in 1841, Mr. Courtenay alludes to the very discussion upon my paper at the Westminster Medical Society, on the Treatment of Stricture by the Potassa Fusa. Mr. Courtenay states, that he first commenced using the potassa fusa in his treatment of stricture of the urethra in 1833; whereas, I had employed that remedy twelve years before the subject was brought forward by me at the Westminster Medical Society in February, 1840, as was stated by me at that time to the members, and which was well known to the pupils attending the surgical practice of the Westminster General Dispensary. Had it not been for Mr. Courtenay's assertion, that his book on the Potassa Fusa Treatment of Stricture was published many years before mine on the same subject, I should not have considered it necessary, in vindication of my own character, to have answered his letter; but, having been compelled to do so by such an unwarrantable attack, I shall, in future, decline any further controversy with that gentleman.

I am, Sir, your obedient servant,
R. WADE.

68, Dean-street, Soho, March 9th, 1850.

ADDENDA TO THE PHARMACOPŒIA.

[To the Editor of the Medical Times.]

SIR,—During my recent travels in China and Japan I became acquainted with several plants having a high reputation for the cure of various maladies, and which, I think, may be advantageously introduced into our Materia Medica.

As I shall shortly publish, in an extended form, the result of twenty years' sojourn in these interesting countries, I will previously furnish you, from time to time, with the result of my botanical discoveries, that they may have a wider scope of usefulness than they are likely to have in a voluminous and expensive work.

One of the more interesting remedies that popular favour has made common in Japan and China is one that is believed to exert a specific influence upon the uterus, more particularly in cases of checked menstruation; and, from the numerous cases in which I have administered it with success, I am inclined to think it will become a valuable addition to our stock of remedial measures.

The tree from which the preparation is made is, no doubt, one of the order Terustronnaca of Jussieu, growing to about the size of the English laurel, with leaves somewhat larger than the hyson leaf, and its botanical characters may be described as leaves lanceolate, alternate, serrated, downy on the under side, and dark green on the upper side, and emits, when bruised, a very peculiar odour, somewhat like sabinæ and pulegum mixed, but likened, by a friend who is now using it, to the smell of the menstrual fluid at its decline.

Its peculiar virtues are asserted, by the natives, to exist only if gathered at a certain age, and under certain states of lunar influence, and with formulæ of a cabalistic nature.

The mode of preparation is, to take a quantity of the leaves, moisten them with samshu, (rice-spirit,) and, after a few hours' maceration, administer about a teaspoonful every hour until the menstrual flux is established. Two or three doses is generally sufficient to produce the result.

Females are betrothed at a very early age in these countries, and they are ineligible for the betrothed unless they have menstruated, which is generally in their eighth year. Should they not do so, and an eligible opportunity offers the Key-tsi-ching is administered, and the affair settled.

The root also possesses the reputation of obviating sterility, and that it has aphrosidaical effects, the experiments I have made leaves no room for doubt.

Having brought some of the plant, which I intend forwarding to the Medico-Botanical Society, as well as sufficient to ensure a reasonable trial in this country, I shall feel happy in forwarding some of the preparation to any Medical Practitioner, on the promise of giving me the result, and exhibiting it according to the instructions I will send with it.

I have the honour to remain, yours truly,
E. WILLIAMS, M.D.

15, Upper Clifton-street, Finsbury.

THE GUY'S HOSPITAL BIENNIAL DINNER.

[To the Editor of the Medical Times.]

SIR,—In the Number of the *Lancet*, published last Saturday, March 9, is an account of the dinner held at the London Tavern, of the gentlemen educated at Guy's Hospital. This account is calculated to give to the Medical Profession at large a partial and very erroneous view of the sentiments held by the majority of the gentlemen of Guy's Hospital respecting the Medical Corporations, and of the mode in which the toast, which included these Corporations, was received. It is but fair that both sides of a question should be heard; especially as the circulation of the *Lancet* may carry it into the distant home of many an old pupil of Guy's Hospital, and thus disseminate an impression, without opportunity of appeal, over which the reporter of the *Lancet* has evidently thrown the colouring of his own somewhat prejudiced views. The toast of "Prosperity to the Medical Corporations" was proposed by the President, Mr. Hilton, with excellent taste, without any allusions that might excite hostile feeling, and with a dignity which befitted the high position of these bodies. It was natural to expect that the announcement of the College of Surgeons would create some excitement among 250 persons, most of them living in and around London, and fully aware of the questions at issue between the College and a portion of the Medical Profession. Some of this was the excitement of curiosity; some of it the excitement of friendly feeling; certainly not all of it was the excitement of enmity. The reporter of the *Lancet* says, "Marks of disapprobation were *generally* shown, and there was great hissing." Now, both the friends and the foes of the College were somewhat vociferous, and it would be difficult to say which party made the greatest noise; much less easy would it be to determine that "marks of disapprobation were *generally* shown." The next sentence, "Many gentlemen, however, out of respect to the occasion, no doubt, maintained an *ominous* silence," is an assumption purely gratuitous, and hence, without value. There are many obvious reasons why a number of guests should have forborne to have expressed themselves in any decided manner, and with as great a degree of fairness might it be inferred, that the silence of these gentlemen was *ominous* of their favourable opinion of the College of Surgeons as that it was *ominous* of their dislike. Besides, "respect for the occasion," which the reporter of the *Lancet* adduces as a reason for this silence, is assuredly less likely to influence the minds of men, who, yet without any congenial existence of their own, are seeking to undo the framework of a mature and established Corporation, than it is to influence the actions of those who rely on the integrity of its efforts to uphold the respectability of the Profession, and advance its intellectual strength.

Further on in his Article, the reporter of the *Lancet* notices, as a fact worthy of comment, (and which he, no doubt, considers *ominous*,) that Mr. Green, in returning thanks, stood up alone among the large assembly, while Dr. Paris, in his speech, was supported by many Fellows of the College of Physicians. This may certainly have been the case; for the Fellows of the latter College present were but few, while at least three-fourths of those in the room were members of the College of Surgeons, and, at any rate, showed a proper discretion in keeping their seats. From what has before been stated, it is easy to surmise, that Mr. Green's remarks in vindication of the proceedings of the College would be received with some little interruption; but it is difficult to see (except to the reporter of the *Lancet*) that this circumstance, necessarily unavoidable, at the present time, in so large a meeting, derives any additional force or value from the fact, that Mr. Green's *personal* claim on the good feeling of his audience was afterwards reciprocated with its just meed of unanimous and enthusiastic assent. In this short explanation, Sir, I do not wish to present other than a fair idea of the general feeling of the meeting, as I believe, that an impartial and too limited view has been taken of it in your contemporary Journal.

I have the honour to be, Sir,
Your obedient Servant,
W. W. KERSHAW.

Kingston-on-Thames, March 11, 1850.

DR. REES ON STRICTURE OF THE ŒSOPHAGUS.

[To the Editor of the Medical Times.]

SIR,—I read with great interest, in the *Medical Times* for February 23, the abstract of a paper by Dr. Basham, of the Westminster Hospital, brought before the Medical and Chirurgical Society, on Stricture of the Œsophagus, induced by swallowing a solution of caustic alkali. I have met with two similar instances in my own practice, the subjects being children; which cases I mentioned at the Hunterian Society, some weeks since, and for which, though imperfectly recorded, I imagine you will grant a space in your valuable periodical.

Case 1.—E. H., aged 5 years and 6 months, though always delicate, enjoyed a tolerable state of health until the last six months. At the commencement of that period, she took up a saucer containing a solution of pearl-ash, and drank a portion. This produced great pain at the time; but, after a short interval, drinking water freely caused the suffering to abate. From that time her health declined, and in a few days she commenced rejecting her food by vomiting, and more lately even liquids were returned. Her symptoms, at the time I first saw her, were extreme emaciation, incessant vomiting after taking the smallest portion of food, urgent thirst, cough, and some expectoration. On percussion, dulness was found over the left infra-clavicular region. The parents gave no hint of any difficulty of swallowing; and, as I conjectured the case to be one of confirmed

phthisis, I made no further examination. She sank a few days after I first saw her.

Post-mortem.—Body extremely emaciated. On opening the chest, the lungs observed filling well the cavity. On removing these organs, hepatization of the left lower lobes found, and in the solidified portions numerous tubercles, some in a softened state. On examination, the œsophagus was found to be of an unequal calibre externally, being alternately constricted and dilated, the textures being at the same time indurated, so as to render it cylindrical in its shape, resembling rather a large artery than the flat and flaccid œsophagus. On cutting into the tube lengthways, the submucous tissue seen to be much thickened, more especially at the constricted portions, where, owing to this thickening, the diameter of the tube was so much diminished as barely to admit a crowquill—the appearance giving somewhat the idea of a strictured urethra. The mucous membrane of the stomach was injected. The mesenteric glands were enlarged, and the mucous membrane of the ileum injected in patches.

Case 2.—M. B., aged 3 years, was brought to the General Dispensary for children in a state of great exhaustion; the mother stating it had kept nothing on the stomach for two days. She considered its illness commenced some weeks before, and was occasioned by her drinking "some strong alkali out of a bottle." From that time she had difficulty of swallowing, which had gone on increasing till, when she brought her, the slightest fluid could not be kept down. This difficulty had, however, increased very materially the last forty-eight hours. The mother added, that she had sought medical advice, but that the remedies failed in their effect, being given with the idea of correcting the morbid state of the stomach; but, she added, "I am sure it is in the swallow." Led by her persuasion, I gave the child some milk; which, after a momentary interval, was rejected entirely, with that peculiar act of retching, better understood than described, so characteristic of mechanical obstruction, whether it be in the œsophagus or in the lower portion of the digestive tube, as in intus-susception. I then endeavoured to pass a small probang, but this, after passing about five inches, was met by a very decided stricture, and could not be made to proceed. On withdrawing the instrument, the child retched and threw up a substance closely resembling an orange-pip, which proved to be a small piece of meat, swallowed two days before, and which had accurately moulded itself to the constriction, and caused the complete obstruction. After this, the child could take fluids, though with difficulty. On the following day I succeeded in passing a middle-sized urethral bougie through the stricture, and continued the practice daily until the largest sized flexible male catheter found its way. The child was then ordered a portion of solid meat, which it took readily, and from that time was able to resume its regular diet, the catheter being passed twice a week for a month. The child's health being then restored, and the mother assuring me no difficulty in swallowing remained, the patient was discharged as cured. The parents promised faithfully to bring the child, should the slightest dysphagia recur; and, as I have not heard of, nor seen them since, I conclude the case continues in a favourable state; though, had I read Dr. Basham's paper, I should have continued the use of the bougie much longer.

I think, Sir, these cases are interesting as evidencing, with Dr. Basham's one, the remote poisonous effects of caustic alkalis; and the latter of the two as showing the benefit to be derived from dilatation of the constricted tube by instruments.

I am, &c.,

GEO. A. REES, M.D.

2, Artillery-place, Finsbury-square.

DR. TILT'S OPERATION FOR OVARIAN TUMOURS.

[To the Editor of the Medical Times.]

SIR,—In your Number 544, March 2, 1850, under the head of "Selections from Foreign Journals," the Obstetric Committee of the American Association seem to approve of Dr. Tilt's proposal to remove the dangerous and intractable ovarian tumours, by cauterising the part of the abdominal wall, and thus to excite an amount of inflammation which shall insure adhesion between the tumour and the parietal peritoneum, then to destroy, by the further use of caustic, the abdominal wall and that of the tumour, and thus evacuate the contents of the latter."

Without a wish to detract from our transatlantic brethren the merit of any step or proceeding calculated to advance our victory over suffering or disease, I must yet claim, not only the proposition of such a proceeding some years since, as that now advocated by Dr. Tilt, but, further, have carried it out with perfect success as regards the operation itself. This was performed with the sanction, and under the observation, of several of my professional brethren here. The particular features of a case, and the steps of the operation were reported by me in your journal some eighteen months or two years since, and also commented on, I observed, by Dr. E. Deboul, in the *Bulletin Générale de Therapeutique*. More recently, also, I have urged upon the attention of an eminent obstetric Physician the advantages of such a proceeding in cases of this disease. He being connected with one of the large Metropolitan Hospitals, I sent to him at the same time a case of advanced ovarian disease, which I judged might be relieved by this operation. With compliments, I am, Sir, your obedient servant,

W. TURNER.

31, Lower Phillimore-place, Kensington,
March 5, 1850.

LETTER FROM DR. TURLEY.

[To the Editor of the Medical Times.]

SIR,—When, in 1848, Mr. Ross published some lectures on Cholera, containing what I knew to be misstatements of the true effects of Dr. Stevens' saline treatment in this disease, I ventured to disabuse the minds of your readers, by showing them, in a series of papers, that Mr. Ross had drawn his conclusions from erroneous data; but I was specially careful not to charge that gentleman with bad motive, prejudice, or unfairness, all alike unworthy of Mr. Ross or any other lover of truth and science. I was aware how meagre were his means of putting his readers into possession of the true history of the success of the saline treatment of Dr. Stevens in the epidemic of 1832 and 1833. Subsequently to the termination of our discussion, Mr. Ross had made the acquaintance of Dr. Stevens, and seen authentic reports of several hundred cases treated on that gentleman's plan. He expressed himself to Dr. Stevens satisfied with these. Since that period he has had abundant opportunity of testing the value of the above treatment in his own practice in this disease, and also must have become acquainted with the success of others who adopted the saline treatment last year. Still he comes forward to assert the inefficiency of his "excellent friend's" method of treating cholera. No one can, however, complain of Mr. Ross's candid avowal of the true results of the experiment in his own hands; but, having put friendship aside, and asserted the insufficiency of Dr. Stevens's saline treatment, when in truth he admits he did not employ it, for the purpose of inducing others to believe it worthless, is, I maintain, ungenerous, if not unjust; and I had, therefore, good reason to feel hurt at his conduct, and pained that he should record another prejudice against a method of controlling a disease whose mortality has been unarrested by any other medical treatment. I ventured to comment on this contribution of Mr. Ross, and exhibited the inferences which the Profession were likely to draw from his paper. I also presumed to show him how careless he had been in concocting such a document, and how inconsistent he appeared with himself, though, at the same time, I believed him a zealous man in the cause of science and of truth; in short, that he had ill-digested the information he intended for the guidance of his medical brethren. This sincere and unanswerable comment has, I see, called down upon my devoted head maledictions of the deepest hue. As I stated before, I have no desire to discuss the subject further at present, but am perfectly willing to lend my back to his ignominious burden, till the whole subject, which is now undergoing a complete investigation, shall, by eliciting *the truth*, fix the scandal on the veritable culprit. In parting with my quondam friend, let me acknowledge his gratuitous moral advice, which is estimated as gratuitous advice generally is; and let me also remind him, that the path to the arena of honourable discussion does not lie through a certain fish-market.

I remain, Sir, yours very truly,

H. TURLEY, M.D.

Ivy-house, Worcester, March 11, 1850.

SUBSTITUTES FOR COD-LIVER OIL.

[To the Editor of the Medical Times.]

Sir,—I observed, a few weeks since, that the *Medical Times* contained a letter or two on the subject of Cod-liver Oil, and, as the subject is a very important one, I beg to offer you a very few remarks on the same subject. The reputed effects of the oil are such, that too much care cannot be exercised to procure it genuine; but, if other oils possess the same virtues, the evils of adulteration will be less, and the price may be considerably reduced. Having been in the habit, for several years past, of examining the oils of many species of fish, and especially the oil from the liver of the cod, I have of late entertained great doubts about the genuineness of much that is sold under that name by druggists. And, as the medicinal results have varied much, I have, to test its virtues as far as private practice would allow, used the oil prepared under my own inspection. All who have taken it have derived great benefit from it, and, if the patients have been young, *i. e.*, under twenty, the benefits have been more marked than in persons much older; and yet some above thirty-five have derived even greater benefit than those much younger. This has arisen, however, from early application. The effects have been so strange, that it has excited in me a hope, that in the early stages it may be relied on as an effective remedy. There is one gentleman, now resident among us for the benefit of our climate, who has been using the oil for the last six months, whose chest symptoms have almost disappeared, and he is himself quite confident, now his general health is improving, that he shall eventually regain that robust constitution which he thought he had irrecoverably lost. Several similar cases have occurred, and they have left us, in their own estimation at least, cured. As the oil is so valuable, it is of paramount importance that we should obtain it genuine. Under the impression, that much of the oil sold as cod-liver oil is spurious, I have tried, with the consent of the patients, oils prepared from the livers of other fish, and especially the *Squalidæ*. As the blue shark, *Carcharias glaucus*, is very abundant during the summer and autumn, I have tried its oil most frequently; but I have also used the oil of the *Lamna Cornubica*, *Galeus vulgaris*, *Mustelus lævis*, &c., and all possess similar curative effects; but they are far more nauseous than the oil from the cod; but still, it appears to be important to know that other oils will produce these important results. The majority of patients would refuse these stronger oils, if given in the quantity usually prescribed; and it requires a strong resolution to take them at all. The oils of the sharks are more stimulating in their effects than that of the cod, and frequently produce a transitory feverish excitement, flushed face, quick pulse, but not a very dry skin. It has appeared to me, that the skin has assumed an unusually soft and moist character in some cases, and the bowels are generally regular. This feverish excitability has not, so far as I have yet observed, been followed by depression. I have observed, however, that during the fever the respiration has been a little more hurried; but on its disappearance, none of the pulmonic symptoms have been aggravated. These oils have had a very good effect, also, in chronic rheumatism, which had resisted every other plan of treatment,—the *modus operandi* I leave others to determine.

If these oils are so stimulating in their effect, when given in the same doses as the cod's oil, the proper dose may be much smaller; so small, indeed, that even the objection raised against that in common use, viz., quantity, may be remedied. I have not been able to use these new forms so extensively as to warrant any strong opinion being given on the point; but enough has been observed, I think, to show that the virtues so much praised as being found in the oil of the cod, are found also in other fish oils. I have not tried the oils of any of the mammalia, nor, indeed, any of the vegetable oils; but the subject is well worthy the attention of the Profession.

If you deem these remarks worthy of record, you will oblige by inserting them in the *Medical Times*.

I am, &c.,

Penzance, March, 850. R. Q. COUCH.

COD-LIVER OIL IN THE ENLARGEMENT OF BONES.

[To the Editor of the Medical Times.]

SIR,—I was much pleased with the perusal of the cases of enlargement of the metacarpal bones so successfully treated by Mr. Ward in the London Hospital; for, although such cases attract but little attention, and are almost lost sight of amidst the multitude of severe diseases and accidents brought under one's notice in hospital practice; yet, it is essential that their proper character and treatment should be understood, lest, by injudicious management, seri-

ous consequences be developed. The treatment adopted also forms another link in the chain of evidence of the power of the justly lauded therapeutic "oleum jecoris aselli," which, if not the primary agent, must have exerted considerable influence in restoring the parts to their normal condition, and which, together with other cases, I think clearly proves that its action on the human frame is not attributable solely to its influence on the assimilative processes, but that it acts in a peculiar manner as a tonic, stimulant, and alterative, thus improving the general health, restoring the secretions to their natural condition, at the same time acting decidedly upon the absorbents, until the healthy balance between growth and interstitial absorption is established. That oil, whether of the fish or vegetable kind, does afford a considerable amount of nourishment, cannot be denied; but, if its effects were limited to this, we should not find it serviceable in the large class of diseases to which it has been successfully applied; neither would its external application produce the results which have been observed. Thus, it was used with signal success by Dr. Percival in the Manchester Infirmary for chronic rheumatism, sciatica, enlarged glands, and contracted joints, as early as 1772, and continued with equal benefit by Dr. Bardeley and other physicians of the same Institution. Tracing the analogy between the diseases benefited by preparations of iodine and cod-liver oil, and knowing that the latter does contain a proportion of the former, it appears but reasonable to attribute some of its effects to the action of that drug. Dr. Duncan and Mr. Nunn, of Colchester, whose opinions deserve the highest consideration, believe that almond oil and cod-liver oil act precisely in the same way; but the addition which they recommend of half a grain of iodine to ten drachms of oil, in the treatment of diseases in which cod-liver oil alone has been successfully used, seems to imply that they are not quite certain of the fact, and are not unwilling to add that upon the action of which many believe the efficacy of cod-liver oil depends.

Truth is generally found between extremes, and in the present instance, if we unite the two opinions, we shall be better able to explain the action of this valuable medicine, the only drawbacks against which, Dr. Nunn acknowledges, "are its nauseous flavour and high price," than by adhering only to one.

I am, Sir, your obedient servant,

CHARLES DAY.

High-street, Gravesend, 6th March, 1850.

VEGETABLE STOPPING FOR TEETH.

[To the Editor of the Medical Times.]

SIR,—Perhaps the subjoined Article on the stopping of teeth may prove serviceable to the Profession. If you think so, make what use of it you please. What I state is from three months' experience. I would first refer to the difficulty which dentists have in procuring a good amalgam. Most in use require considerable pressure—a great objection when the nerve is exposed; and, with the exception of gold, I believe all the compounds used for stopping assume a dark colour, which is anything but a recommendation.

It occurred to me that a preparation that would obviate these objections and easy of application would prove a great desideratum. Such will be found in the use of collodion. Pour a small quantity of collodion on a plate or glazed surface, allow it to evaporate till it acquires the consistence of a thick paste, or, in more familiar language, a pill consistence; let the cavity of the tooth be well dried, and quickly filled with the paste; in the course of a few minutes it will be hard and fit for mastication. Very slight pressure is required, and, being of a vegetable nature, somewhat analogous to the tooth itself, will resist the action of vegetable juices, and remain colourless. I would just mention that the collodion used was prepared according to a private formula, (differing in some respects from the usual process,) which, if desired, I should be most happy to forward for insertion. Ordinary collodion may answer—what I have used does most satisfactorily.

J. T. DAVENPORT.

33, Great Russell-street, Bloomsbury.

PREMATURE BIRTH.

[To the Editor of the Medical Times.]

SIR,—Will you allow me to refer your Correspondent, Mr. Fincham, to "Burns's Midwifery," where he will find the relative proportions and weights of the fœtus given:—"In the sixth month the fœtus is perfect and well-formed, measures nine or ten inches, and weighs about one pound Troy. .... The fœtus is now so vigorous in its action, that there have been instances, though most rare, of its continuing to live if born at so premature a period."

Yours, &c.,

Whickham, Feb. 18, 1850. T. N. M.

MEDICO-CHIRURGICAL SOCIETY.

[To the Editor of the Medical Times.]

SIR,—As your Correspondent "Medico-Chirurgus" seems to have overlooked an important feature in the recent contest at the Royal Medical and Chirurgical Society, I crave permission to say, that the question at issue, was not, whether seniority constituted, the only claim for a seat in the Executive, but whether a preference should not be given to those Fellows whom you so aptly designate "*the working bees of the hive*," in contradistinction, I presume, to the drones. Thus, all the four names inserted in the amended list, were of Fellows who had contributed papers to the Transactions; whereas, none of those struck out, although recommended by the Council, ever had; nay, some had never even taken part in the discussions, which was also considered a disqualification. I am no enemy to good listeners; they are a most useful class; for, if all were speakers, there would be no audience. But, in a Society like the Medical and Chirurgical, those who write papers, or join in the discussions, and so contribute their quota of experience and knowledge, surely have higher claims to distinction, than others who do neither. This was one of the chief points contended for by the opposition; and the very large number of Fellows who supported that view of the case, shows the feelings entertained.

Your Correspondent also appears to throw blame upon the minority, for not constituting other names for those they inserted in the opposition list; and he especially alludes to fourteen very respectable individuals, some of whom, in his opinion, ought to have been preferred; chiefly, as it would seem, on account of their longer standing in the Society. If any censure be applicable in respect of the Fellows thus passed over, it applies to the Council for having omitted their names during the late nominations, not surely to the opposition; more especially, as very few of the gentlemen so named possessed the qualifications considered requisite by the independent Fellows that supported the broad principle laid down by Dr. Webster, in his address to the Society, of only giving their suffrages to "the productive labourers in their own vineyard of Medical Science."

So far from asserting, that some of the fourteen Fellows named by "Medico-Chirurgus," would not make very good Councillors, and have been too long passed over, many think otherwise; but, on looking over the list he furnishes, it appears, although none are junior Fellows, as all were elected either in 1841, or prior to that year up to 1837, only one of them has contributed a paper to the Transactions, whilst another is only a joint author; and none of the remaining twelve have yet appeared as contributors in the Society's Transactions; besides which, a large proportion have never taken any part in the discussions. In making these remarks, I by no means wish to draw invidious distinctions; on the contrary, I am only anxious to state facts in justification of those Fellows who, like myself, voted against the constituted authorities, in order to assert a principle they considered equitable; and this was done, irrespective of individuals or private friendship.

12th March. SOCIUS.

COLLEGE FELLOWSHIPS.

[To the Editor of the Medical Times.]

SIR,—I am one of those who did not join in the scream which was raised when the College of Surgeons invented the Fellowship. In fact, I did not find myself aggrieved by it. The inventor of that distinction, as it seemed, and still seems to me, found a real difference existing between two classes of surgeons. One, content with the minimum of knowledge, obtained in a minimum of time, at a minimum cost, and turned to the speediest account for a minimum of remuneration; the other, striving, from the first, at the highest degree of professional excellence, and content to wait for the highest rewards which such excellence was likely to obtain. This real distinction, this unwritten law, which had all the convenience and inconvenience of unwritten law, or custom, the inventor of the Fellowship wished, I should think, to see made more definite,—less the result of accident and caprice. I, for one, as I say, was not injured by it. I am, and I know I am, one of the unscientific and imperfectly-educated class. I am well enough educated (thanks to a public school) to see that—to know that there is much that I do not know, and now never can know. It is too late to learn. What we learn at school is the *art of learning*. In my day, the classics were usually the instruments by which that art was taught. I left off the study of that art at fourteen; was apprenticed in London, and learned some other things well worth knowing, about medicines and prescriptions of great physicians and surgeons; also about the subject of medicines—living men and women and children—what they liked and what they did not like—how they lived and how they died—what manner of creatures they were. I was learning medicine as a groom learns farriery. Then I went to the lecture-room and the hospital. There I saw more men and women and children, living and dead, and learned why they had certain symptoms, and how they were treated. Then, after passing, I went abroad, and had very little practice among the folks I travelled with, and therefore much time for thinking and observing. When I came home, I worked hard among the poor for some years, and am now a practical man, of about eighteen years' standing, with a good deal of "that wisdom of fools—experience," and the comfort of leaving a good many patients every day better than I found them. Now, for what on earth should I have been made a Fellow? I remember thinking, for I was not fool enough to say so, "If they offer me the Fellowship, I won't have it." Pure consulting surgeons ought to be greater men than I am: most of them, I am glad to say, are so. I am on friendly terms with many better men than myself. *Pauperem dives me petit.* If I behave decently for two years more, and they make a fellow of me then, why Smith and Jones, my neighbours, won't think of breaking my windows because I have no blue bottles in them, but will know that I am dignified because I am of 20 years' standing, and of good professional character. Having given this account of myself, I will not trespass further on your pages this time by asking you or your readers, why the Fellowship is only restricted to those who do not *openly* trade in drugs? Why should secret trading in drugs be compatible with the dignity of the Fellowship? I shall probably, next week, give you some reasons for my asking this question, and some opinions on the subject of pharmacy in connexion with medical practice.

I am, Sir, your obedient servant,

JACOB.

THE LAW OF LUNACY.

[To the Editor of the Medical Times.]

"No man is so foolish, but may give another good counsel sometimes; and no man is so wise, but may easily err, if he will take no other's counsel but his own."—*Ben Jonson.*

SIR,—I have perused, with satisfaction, your late articles on the present defective state of the Law of Lunacy, and, though I cannot but think that your illustrations are somewhat overdrawn, yet every philanthropist must feel deeply indebted to you, for your zealous advocacy of the cause of suffering humanity. My opinion of this law, as it at present stands, is, that with a few trifling additions and alterations, it might be readily converted, from an objectionable, into a really useful and satisfactory measure.

I apprehend that few, if any, with the exception, perhaps, of those who have deservedly fallen under their censure, can impugn the justice and impartiality invariably exercised by the present Commissioners in Lunacy; nor can it be denied that a marked improvement has taken place in licensed houses generally since the institution of this Commission; and from personal knowledge of the state of several licensed houses, I can testify to the great benefit derived from their visits and suggestions;—their powers, however, are too restricted, and I conceive, that, had they the means of compelling *all proprietors of licensed houses to have a resident Medical superintendent, chosen and appointed by the Commissioners themselves*, more real advantage would accrue to the afflicted sufferer than from any other legislative measure that could be devised.

The benefit to be anticipated from such a measure as the above must be obvious to all in any degree acquainted with the management of asylums and the insane, and we may, I imagine, fairly assume, that were this plan adopted, unjustifiable coercion would be for ever abolished; or, if resorted to, detection and punishment must invariably follow.

With regard to the prevention of patients being confined in an asylum when sane, with some criminal motive, I apprehend, that if such cases *do exist*, they are extremely rare; and, on this point, I cannot better express my own opinion than by the following extract from a paper "On the Amendment of the Law of Lunacy," by Dr. Robinson, of Newcastle-upon-Tyne. Having recommended the appointment of District Inspectors in Lunacy, to act under the orders of the Commissioners, Dr. Robinson says:—"In the case of private patients about to be confined in Asylums, I would propose, that, in addition to the certificate of the Medical Practitioner who might have been in attendance, a voucher of the fact of insanity, together with a statement of the reasons for adopting that conclusion, should be obtained from the District Inspector, or, in his absence, from a specially qualified Practitioner, who might be termed a Licentiate in Lunacy: The power of granting this license might either be left in the hands of the Medical Commissioners in Lunacy, or remain with any of the Medical Examining Boards. By thus restricting the power of granting the second certificate of insanity to those medical men who possessed a practical knowledge of mental disease, an inducement would be held out to future students of Medicine to avail themselves of the opportunities now afforded by the opening of several large Asylums for the clinical study of insanity, while the Medical Colleges would also, probably, be led to direct more attention to this subject in their examinations and curricula. There might also be some advantage in requiring each application for the admission of a private patient to be counter-signed by a magistrate or clergyman previously to its having legal effect. This precaution would not, of course, be calculated to cast any additional light upon the mental state of the patient, but simply to guarantee, as far as possible, the respectability of character of the person making the application." By adopting the preceding suggestions, it seems to me, that the principal defects of the present Act would be wholly removed, and, at the same time, likewise, that obloquy, which has always been attached to private asylums and their proprietors. Trusting these remarks may be adapted for insertion in your valuable Journal,

I have the honour to be, Sir,

Your obedient servant,

Θαλῆς.

Leominster, March 1, 1850.

ROYAL PHYSICAL SOCIETY OF EDINBURGH.—At a recent meeting of this Society, Professor Fleming in the chair, a living specimen of the "gordius fragilis," a singular marine animal was exhibited by Sir John G. Dalyell, Bart. The animal resembled a planaria in form, and in its power of changing its shape by extension and contraction; but the most singular part of its history is its habit of dividing itself into fragments. The specimen before the society arrived in two pieces. The larger division was about a foot in length when extended, and contained the head. It was flattened from side to side, and exhibited considerable activity, swimming rapidly and gracefully round the jar in which it was confined. The broken fragments have the power of reproducing perfect animals.

HEALTH OF LONDON DURING THE WEEK ENDING MARCH 9.

The weekly mortality continues to decline: in the week ending last Saturday, the deaths registered in London were 875, being a small decrease on the previous week. The steady decrease is exhibited in the following series of numbers, being the deaths returned in each week since January, namely, 1094, 957, 938, 911, 896, and 875. To compare the mortality of last return with that of the same week in former years (1840-9), it appears, that only in 1842 and 1846 were the deaths less than 900; with three exceptions, they were always above 1000, and in 1845 rose to 1141. The average of ten corresponding weeks, corrected for increase of population, is 1095, compared with which the deaths in last week show a decrease of 220. Amongst epidemics, small-pox, scarlatina, hooping-cough, influenza, and typhus show considerably less than the usual fatality; measles and diarrhœa have now fallen to the average, the latter numbering only 9; and in the whole epidemic class are enumerated 133 deaths, whereas, the corrected average is 106. Sixty-five persons died of bronchitis, 74 of pneumonia, 17 of asthma; the first being rather above the average, the last two below it. In the class of diseases of the respiratory organs, (exclusive of phthisis and hooping-cough,) 171 deaths are included, whilst the corrected average is 207. From phthisis, or consumption, 107 persons died in the week; the average is 152. In the last week 101 persons were registered, who had died in workhouses; 67 who had died in hospitals; 8 in prison and Milbank Penitentiary. Of the 67 in hospitals, 12 occurred in naval and military establishments, and 11 in lunatic asylums.

The deaths in the several hospitals of London occurred as follow:—

GENERAL.		Otto-house (Fulham) ...	0
St. George	3	Blacklands-house ...	0
Westminster	2	Northumberland-house	0
Charing-cross	1	Whitmore House ...	0
Middlesex...	4	Pembroke House ...	0
University College ...	0	St. Luke	0
Royal Free Hospital ...	0	Miles'	1
King's College	2	Warburton's	0
St. Bartholomew... ...	9	Lunatic Asylum, Bow ...	3
London	8	Bethlem	0
Guy's	7	Lunatic Asylum, Brixton	0
St. Thomas	3	Retreat, Clapham ...	0
FOR CONVICTS.		New County, Wandsworth	4
Hospital Ship, Unité ...	0	Peckham House ...	1
Penitentiary Hospital, Millbank	6	Camberwell House ...	1
MILITARY AND NAVAL.		LYING-IN.	
Royal Hospital, Chelsea (South)	1	Queen Charlotte's ...	0
Royal Hospital, Greenwich (East)	8	British	0
Royal Military Asylum	0	City of London	0
Coldstream Guards Hos.	0	Hospital, York-road, Waterloo 2nd part ...	0
Grenadier Guards' Hospital	1	FOR PARTICULAR CLASSES.	
Scots Fusilier Guards ...	0	Female Servant Invalid Asy., Stoke Newington	0
Royal Ordnance	0	German Hospital... ...	1
Dreadnought Ship ...	2	French Hospital	0
LUNATIC.		Portuguese Jews' Hospital	0
Kensington House ...	1	German Jews' Hospital	0
Munster-house (Fulham)	0	FOR SPECIAL DISEASES.	
Normand-house (Fulham)	0	Small Pox	0
Sussex & Brandenburgh-house (Fulham) ...	0	Fever Hospital	2
		Lock	0
		Consumption, Brompton	2

TOTAL, 81.

MORTALITY TABLE.

Deaths in the Week ending Saturday, March 9, 1850.
(Metropolis.)

CAUSES OF DEATH.	Total.	Average of Ten Weeks.
ALL CAUSES	875	1004
SPECIFIED CAUSES	873	998
Zymotic (or Epidemic, Endemic, and Contagious) Diseases	133	179
SPORADIC DISEASES:		
Dropsy, Cancer and other Diseases of uncertain or variable seat	50	58
Tubercular Diseases	149	185
Diseases of the brain, Spinal Marrow, Nerves, and Senses	141	125
Diseases of the Heart and Blood-vessels	33	29
Diseases of the Lungs, and of the other Organs of Respiration	171	190
Diseases of the Stomach, Liver, and other Organs of Digestion	50	58
Diseases of the Kidneys, &c.	15	10
Childbirth, Diseases of the Uterus, &c.	13	11
Rheumatism, Diseases of the Bones, Joints &c.	10	6
Diseases of the Skin, Cellular Tissue, &c.	4	1
Malformations	2	3
Premature Birth and Debility	13	22
Atrophy	18	13
Age	42	65
Sudden	9	14
Violence, Privation, Cold, and Intemperance	21	27
Causes not Specified	2	5

The following is the number of Deaths occurring from some of the more important special causes:—

Apoplexy	34	Heart	30	Phthisis 107	
Bronchitis ...	65	Hooping-cough	35	Pneumonia ...	74
Cholera.....	...	Hydrocephalus	31	Scarlatina	14
Childbirth	7	Influenza	...	Small-pox	6
Convulsions...	37	Liver	8	Stomach	4
Diarrhœa	9	Lungs	9	Teething	5
Dropsy	12	Measles	17	Typhus	29
Erysipelas ...	7	Paralysis	33	Uterus	4

BIRTHS AND DEATHS.

	Births.	Deaths.	Births over Deaths.
Males	733	433	300
Females	743	442	301
Total.....	1476	875	601

METEOROLOGY OF THE WEEK.

		Sunday	Monday	Tuesday.....	Wednesday.	Thursday...	Friday	Saturday ...	Means ...	
Electricity.*		Nothing shown.	Nothing shown.	Nothing shown.	Nothing shown.	Nothing shown.	P. and tension variable throughout the day.	P. and tension strong throughout the day.		
Rain in Inches.		0·00	0·04	0·00	0·00	0·00	0·00	0·00	SUM 0·04	
Amount of Horizontal Movement of the Air.	Miles.	75	125	70	80	45	30	5	SUM 380	
General Direction of Wind.	P.M.	S.W.	N.	S.W.	W.	Calm.	N.E.	Calm.	Variable.	
	A.M.	S.S.E.	N.	Calm.	S.W.	S.W.	N.	S.E.		
Difference between the Mean Temperature of the day and the same day on an average of 7 years.		+ 7·8	− 5·0	− 0·4	+ 6·1	+ 4·0	+ 2·5	+ 3·8	+ 2·7	
Ditto. Dew Point.		42·2	33·5	30·4	38·7	42·6	40·9	41·1	38·5	
Mean of Thermometer. Dry.		47·0	38·5	38·4	44·9	42·8	41·6	43·3	42·4	
Mean of Barometer.		29·617	30·021	30·423	30·442	30·395	30·267	30 085	30·179	

* In this Column, A. stands for Active; N. for Negative; and P. for Positive.

MEDICAL NEWS.

APOTHECARIES' HALL.—Names of gentlemen who passed their examination in the science and practice of Medicine, and received certificates to practise, on Thursday, the 7th March, 1850:—John Savery Burd, Ideford, Devon; Bernard Conway, Londonderry; Robert Charles Hurst, Bedford.

UNIVERSITY COLLEGE.—The disagreements between the Council of this College and the students, arising out of the supposed uncourteous behaviour of the Secretary towards the latter, and a manifestation of their disapprobation of the Secretary's conduct, unequivocally expressed, and highly distasteful to that gentleman, has terminated as every friend to the Institution must have desired. The Court of Discipline, composed of certain members of the Council and the Deans of the Faculties of Medicine and Arts, condemned two students to rusticate for six months. Their offence was hissing the Secretary within the precincts of the College. The young gentlemen, however, acting on the advice of real friends, offered an apology, and prayed that the severe sentence inflicted on them might be remitted. The Faculty of Medicine having earnestly recommended that the apology should be accepted, the Court of Discipline yielded to their strongly expressed desire, and the College again enjoys its wonted quiet. The harmony which has always existed between the Professors and the students was throughout unbroken. It is reported that the Council are about to effect considerable improvements in the arrangement of the medical department, which will add materially to the comfort and advancement of the medical students. The Medical Library, among other things, is, we hear, to undergo complete revision.

ROYAL COLLEGE OF SURGEONS.—Professor Owen commenced his course of lectures on the Generation and Development of the Vertebrated Animals, in the Theatre of the Institution, on Tuesday last, on which occasion he was surrounded by a crowded and distinguished audience.

MR. JOHN QUEKETT brought his very interesting and valuable course of Microscopic Demonstrations to a close on Saturday last, when several of his friends expressed a wish to present him with some testimonial expressive of their approbation of the zeal, kindness, and ability displayed by him in the Demonstrations given in the Theatre of the Royal College of Surgeons. Several gentlemen at once entered their names, whose joint subscriptions amounted to nearly 15*l*. Dr. Chambers, of Harley-

street, and Mr. T. M. Stone, of the College, consented to act, the former as Honorary Secretary, and the latter as Treasurer, for carrying out the object in view.

ARMY MEDICAL DEPARTMENT.—From the Army Estimates Report submitted to the House, we make the following extracts, referring to the Medical Department of the service, for hospital expenses, medicine, and treatment of the sick, viz., for

	£	s.	d.
Charge of general and regimental hospitals at home and abroad ..	54,000	0	0
Costs of medicines and surgical instruments and carriage of ditto..	9,000	0	0
Allowances to private Medical Practitioners and Medical bills..	3,500	0	0
Costs of horse medicines, including bills of private Veterinary Surgeons	400	0	0
Subscriptions to the Westminster, St. George's, and Small-pox Hospitals, 5 guineas each	15	15	0
	£66,985	15	0
Invalid Depôt, Chatham	2,185	16	8
Medical Museum, Ditto	250	0	0
Medical attendance on recruiting parties and recruits	400	0	0
	£69,751	11	8

OBITUARY.—On the 7th inst., at Epsom, John Allan, Esq., surgeon, R.N., aged 61. Same day, Bethnall-green-road, Thomas Taylor, Esq., aged 39. The 9th inst., at Little Holland House, Kensington, George Pardoe, M.D., aged 40.

DEATH OF MR. MALYN, F.R.C.S.—Died on the 9th instant, after a protracted illness, Mr. John Malyn, F.R.C.S.E, aged forty-eight years, many years Surgeon to the Western Dispensary and Lecturer on Anatomy and Physiology at the Westminster Hospital School of Medicine. Mr. Malyn was born at Manchester, commenced his professional education at the infirmary of that town, where he became distinguished alike for his talent and assiduity. After the death of Mr. Joshua Brookes, he joined his friend Mr. Thomas King in opening the Blenheim-street School, and subsequently joined that attached to the Westminster Hospital. As a lecturer Mr. Malyn was eminently popular and successful. He was a contributor of various articles to the Cyclopædiæ of Medicine and Surgery, and was a singularly guileless, upright, and estimable man; faithful himself, he relied on the good faith of others, and having on two occasions been deceived by those on whose good offices he had reason to rely, the disappointment, acting on a too sensitive mind, gave rise to the malady which ultimately led to his premature death. He has left a widow and numerous friends to deplore his loss.

A HEAVY BLOW AGAINST QUACKERY.—An action has been tried at the Northern Circuit, before Mr. Baron Alderson, in which a druggist named Kirkus was plaintiff, and another named Atkinson was defendant. The action was to recover damages for manufacturing and selling pills called "Torr's Family Pills." It appears that the plaintiff married the daughter of Torr, and thus came into possession of the recipe. He sold the pills under the title of Torr's Family Pills, manufactured by Kirkus. The defendant succeeded to Torr's business, and he sold the pills also, but as Torr's Family Pills, manufactured by Atkinson. The labels were the same in both instances. The counsel for the defence contended that, so long as the defendant did not profess to sell Torr's Pills, as manufactured by Kirkus, he had a right to manufacture and sell Torr's Pills, as manufactured for himself. The judge charged for the defendant, who obtained the verdict. Thus, then, the right to a patent or quack medicine may be defeated by the person making it merely adding to the label, "as manufactured by ——!" This will, we fancy, be one of the heaviest blows yet given to the patent medicine system.

EFFECT OF POVERTY ON THE MORTALITY OF CHOLERA.—In 19 districts of London, the rent is 4·284*l.* per head, or higher; in 19 districts it is less; the average in the former districts was 8·140*l.*; in the latter districts, 3·831*l.* In the 19 poorer districts the mortality from cholera was 98 in 10,000, or double the mortality (46) in the richer districts. The general mortality from all causes was 226 in the rich, 254 in the poor districts. The mortality from cholera was 150 in 10,000 in six districts supplied with the water of the Thames below Battersea, the house-rent being 3*l.* 16s. per head; the mortality from cholera of 10 districts where the house-rent was less (3*l* 13s.), and the people probably poorer, was only 56 in 10,000, or a third of the former rate. The 10 districts were supplied with water from the New River, Lea, and Ravensbourne. The population was more dense, but the ground on which their dwellings stand is higher. It is certain, then, that a degree of poverty, which in summer implied as much crowding and dirt, as privation of food, was only one of the causes of the mortality of cholera. The water, the elevation, and the drainage maintain their importance in every combination of the facts that can be made.—*From the Registrar-General's Return.*

HER MAJESTY has presented 50*l.* to the Portsmouth, Portsea, and Gosport General Hospital. It is in future to be called a Royal Hospital.

MEDICAL WITNESSES.—At the trial of a man recently at the Glamorgan Assizes for rape, a surgeon of the name of Marsh, gave evidence, which is characterized as being very unintelligible. The Judge, after putting a great many questions to him, at last said, "I really cannot understand what you mean, Mr. Marsh." It is a great pity medical men do not understand how to express themselves in courts of justice, without clothing their ideas in technical language.

THE *Cambrian* of the 8th ult. contains in its obituary a list of deaths of octogenarians—John Bevan, 82; Rev. John James, 78; John Tall, 93; W. Bryant, 72; David Roberts, 74; T. Griffiths, 73; T. David, 77; Miss Roberts, 80; E. David, 78; Rev. J. Williams, 72; Major General Faunce, C.B., 74.

WEST DERBY.—The Committee, appointed to investigate the claims of the medical men for medicines, attendance, &c., during the late epidemic, have reported, and recommend that the same be paid.

HEALTH OF LIVERPOOL.—The report of the health officer for Liverpool shows a decrease for the past week of ten deaths upon the previous seven days, and of fifty upon the average of the season. The town has never been so free from any epidemic.

THE funds of the Royal Infirmary in Edinburgh have been enriched by a donation to the amount of 2,000*l.* from Mr. Cowan, the father of the representative of the city in Parliament.

EXTRAORDINARY SURGICAL OPERATION BY A BEAR.—According to the *Politique*, some peasants of Urdoz, in the Lower Pyrenees, having discovered the track of a bear, procured guns, and beat up his quarters. One of them, named Mormela, armed with a double-barrelled gun, shot the animal in the shoulder; it immediately rushed upon him, and would have torn him in pieces, had not his comrades poured in a volley on the creature, and killed it. The most dangerous wound Mormela received was in the neck, by which an *enormous goitre was torn off*. The wounds have been dressed, and some hopes are entertained of his recovery.

FILTHY HABITS OF THE POOR.—At a recent meeting of the City Court of Sewers, Mr. Hayward, the Surveyor of the Commission, stated, that, notwithstanding the expense and trouble to which the Court had gone, in supplying water-closets, and other means of cleanliness, in the localities of Amelia-place and Sevenship-alley, so often alluded to in Mr. Simon's Report, so filthy were the habits of the population in that crowded neighbourhood, that the accommodation afforded was quite neglected, and it was quite impossible to conceive anything worse than the scene presented. The sum expended in cleansing these places, which has been quite thrown away, amounted to 125*l.*

SHERIFF GORDON has been re-elected Lord Rector of the University of Aberdeen, by large majorities in all the nations.

63*l.* 10s., the proceeds of a charity ball, have been presented to the Birkenhead Hospital and Dispensary.

THE GOLDEN FLAX LINT, of which a sample has been submitted to our inspection, is certainly a very superior article to the lint in common use. It is soft, uniform in thickness, light, very clean, and free from knots. The proprietors assert that it is made directly from the flax, and guarantee it to be pure linen, free from either cotton or woollen, and grass-bleached. Surgeons who have occasion to use lint largely, and in long pieces, too, will be glad to find that they can have this lint in any length, even as long as fifty or 100 yards. There are many advantages attending the use of lint prepared with great care, and made from one uniform article, instead of the coarse, common, harsh, and dingy lint which is generally sold, and which, when used to dress sores, is more likely to keep up irritation than to aid a cure. Surgeons should use the best articles they may require, and although an improvement in lint may be looked upon as a trifle, medical men engaged in practice are not apt to find it so.

TO CORRESPONDENTS.

"A Surgeon-Chiropodist" must write in a very different style, before he can hope for admission to our columns.

"Gateshead-on-Tyne."—We shall be glad to hear from our Correspondent.

"Oxford."—Many thanks to our Oxford Correspondent.

"Bath."—The proposal made by a Bath Correspondent is declined with thanks. We have no vacancies on our staff.

"Verax" has not yet favoured us with his name.

"A. Z." is referred to the Student's Number, of the last year for the information he requires.

"T. B."—The subject of complaint does not concern us. It occurred under a former Management and Proprietary.

"Amicus Curiæ."—We saw the article in "Chambers'," of course; but, for once, cannot agree with our excellent contemporary. We cannot distinguish "the general benightedness in the London medical world," that so annoys our friends of "Auld Reekie." The miracles performed in Edinburgh by chloroform, we have our doubts about; and if our friends would only, any week, go through Guy's, Bartholomew's, or King's College Hospital, they would witness a full recognition of the value of this important agent. We shall consider the subject next week.

"Alibi, Hastings."—The information will be found in our Student's Number. 2. Read Bichât and Carpenter.

"A Constant Reader" says, all the observations on the electricity of the atmosphere, alluded to by Faraday and Quetelet, have been corroborated by those of Mr. Birt, at the Observatory at Kew. Out of 15,170 observations, made during a period of five years, 14,815 were positive; the tension of the atmosphere lowest at two o'clock a.m., when cholera seemed so fatal, increasing up to ten o'clock. As to the months, as found by Quetelet, the lowest amount of electricity existed in England in June and August. Positive electricity seemed not so much due to impending storms and rain as negative.

A Correspondent forwards us the following:—"Recipe for Cancer.—It is of the date of 1748.—Take of crowsfoot one handful, dog-fennel six sprigs; pound them well in a mortar. Then add, white arsenic and cane brimstone, of each, finely powdered, two thimblesful: mix them together, and make into small balls; which dry, and keep for use. When you use them, you are to rub a part thereof into fine powder, in proportion to the sore; then mix it up with the yolk of an egg, to the consistence of paste; then lay over the skin that covers a kidney, and rub it round the edges with part of the yolk. When it falls off, (which there must be no force used in, for fear of breaking fibrous roots, by which means the cancer may grow again,) you must dress the sore with "ladies' mouth" reduced to powder, and made into an ointment with the yolk of an egg." We need scarcely add, the remedy is more curious than beneficial, further than arsenic is concerned.

"F., Med.-Chir. Society."—The Council must have worked hard to get together so large a number of their friends at the late anniversary; and yet, after all, they were very closely run, their majority being only seven. We understand, that 179 Fellows attended that meeting, being, probably, the largest number present for many years past.

"M.R.C.S., Eng."—The Council do not consider that they have insulted the commonalty of the College by the institution of the Fellowship. It is strange, that the unanimous voice of the Profession has not yet caused them to form an opinion more in unison with justice and truth, *Magna est veritas, et prævalebit.*

"The Golden Flax Lint."—We have forwarded the sample sent to us of the golden flax lint to a Surgical Correspondent, who will report upon it.

"Mechanical Leeches."—Our Correspondent, who inquires where he can obtain the apparatus for the Mechanical Leeches, had better apply to Mr. J. T. Tweed, jun., 9, Gilbert-street, Grosvenor-square, the gentleman who wrote upon the subject in this Journal.

"An Old Supporter."—We will obtain the information for our next Number. We believe, however, that the Iodide of Potassium has been proposed for the purpose.

"Mr. Pincott's" case will be published next week.

"Pharmaceutical."—Many papers are read at the Pharmaceutical Society which are better adapted for a medical society, than one composed of druggists, however educated. Those members of our Profession who overstep the limits of their duty, by seeking "to create and sustain a half-educated class of hybrids," are to be blamed. Such papers should be sent to the Medico-Botanical Society,—a Society well worthy of support, long-established, and in its objects especially devoted to the subjects of inquiry above-named. Mr. Foote, the Senior Secretary, will be glad to receive such papers, either at 32, Sackville-street, or at his own residence, Tavistock-street, Covent-garden.

"A Naval Surgeon" writes as follows:—"A week or two since, amongst your Correspondence, I observed a regret, expressed by Justitia, how seldom the General Practitioner had been rewarded for his undaunted exertions in the late epidemic. Allow me to ask, through the medium of your valuable Paper, whether any medical officer, either of the garrisons, marines, dockyards, or in the ordinary,—and more particularly of the Portsmouth and Plymouth divisions,—have even received official letters, or placed in garrison orders, or advanced in rank, for their also much increased duties, during the prevalence of that fearful scourge."

Our Correspondent at Torquay is informed, that we will take measures to insure accuracy.

"Dr. Inglis's" letter upon Homœopathy and its Practitioners will appear next week.

We have been favoured with the Monthly Report on the Mortality and Public Health of Oxford. We confess, we do not quite understand it, the statistics having reference to December, 1848, while the sheet is dated 1850. We quite agree with the motto.

ORIGINAL CONTRIBUTIONS.

CASE OF SUPPOSED ABSCESS OF THE SPLEEN,
EMPTYING ITSELF THROUGH THE ABDOMINAL PARIETES AND BRONCHIAL TUBES.

By RUPERT PINCOTT, Surgeon, Ongar, Essex, Formerly House Physician, King's College Hospital, London.

Mrs. C., aged 49, married, no children, native of Yorkshire; married fifteen years, during which period she has resided in Essex; health always very good until her confinement, a year and a half after her marriage, when she had a very difficult labour; delivered by craniotomy; labour followed by an attack which I imagine, from description, was "milk fever;" she remained in her usual good health until four years ago, when she suffered from a severe pain in left hypochondrium; this was relieved by treatment, but recurred at irregular intervals, and from error in diet in an aggravated form; she has been under the care of various Medical men, but has only derived partial and temporary relief.

August 15th, 1848.—First seen by me in the evening upon the sofa, complaining of severe lancinating pain in the left hypochondrium, extending to the back, where, she states, there is a burning sensation; complains of nausea; has vomited several times during the day; pain is so severe, that she is afraid to take any food; when the stomach is empty, she is comparatively free from pain; extreme tenderness over the seat of pain—so much so as to be afraid of any manual examination; bowels not relieved for two days; has suffered much from constipation for several years. I ordered hot fomentations to the seat of pain, 2 minims of hydrocyanic acid every four hours, until the sickness and pain abated, then to have a mercurial purgative of calomel and colocynth, followed by a senna draught.

16th.—The purgatives acted freely; evacuations copious, constipated, of a dark slate colour, and very offensive. After pursuing an alterative plan of treatment for some days, strict attention to the bowels, and counter-irritation to the seat of pain, she gradually improved, and I discontinued my attendance on the 29th of September, enjoining strict attention to the bowels and diet, which I directed to be of the lightest kind; the propriety of this plan having been well illustrated in her own person a few weeks previously, in consequence of an alveolar abscess, which prevented her taking any solid food for more than a week, during which time she suffered comparatively little pain.

Dec. 18th.—She again requested my assistance for the same train of symptoms; states that she has never been quite free from pain since I last saw her, but that it is much aggravated after taking solid food; she has frequent nausea and occasional vomiting; countenance dusky and sallow; has never had jaundice or passed biliary calculi; never had ague; no tumour can be detected at the seat of pain; the same treatment was resorted to as before, followed by tristritrate of bismuth, which afforded but slight relief. I then prescribed nitrate of silver in ½ grain doses with some benefit; tartar emetic ointment was rubbed in so as to produce free pustulation, which gave marked relief; discontinued my attendance on the 31st; the symptoms much relieved, and the paroxysms of pain much less frequent and violent.

March 20, 1849.—Summoned in the night (at one a.m.) by a messenger, who stated that Mrs. C— was dying. On my arrival, I found her suffering excruciating pain in the left hypochondrium, which prevented her breathing; countenance pale, bathed with perspiration; respirations quick and short; nausea; exquisite tenderness on attempting to examine the seat of pain; pulse thready and too frequent to count. I feared that perforation of the stomach had occurred, the symptoms were precisely such as indicate that frightful lesion. After the lapse of about half an hour, there appeared a tendency to re-action, accompanied by nausea and slight attempts to vomit. Upon inquiry, I discovered that she had been entertaining a few friends for supper, and that she had partaken freely of onion sauce, an article of diet of which she is very fond. On this account I encouraged the efforts to vomit by a copious draught of warm mustard and water, which evacuated the stomach freely,—several large pieces of undigested onion were ejected. The efforts of vomiting produced excessive pain in the side, which she described as if a dagger were plunged through to her spine.

To have hot fomentations to the painful part until the pain abates.

℞ Solut. morphiæ hydroch. ℥j., (gr. 1-8.;) mist. camphoræ, ℥j., ft. haust.; 4to. horis capiend.

21st, 8 a.m.—Still complains of the lancinating pain in left hypochondrium; has had no sleep; skin hot; tongue dry; thirsty; pulse 120, sharp and hard; tenderness on pressure extreme; has voided urine; bowels have not been relieved; venæsectio ad, ℥xij. when syncope was induced. Hirudines No. xii. parti dolenti.

℞ Hydrarg. chlorid. gr. iiss.; pulv. opii. gr. ss., curfp. fpil. 3ts. horis capiend.

9 p.m.—The pain slightly relieved; still great tenderness on pressure; the leeches bled well; did not faint; pulse 110; thirsty.

Hirudines xx. parti dolenti; mist. saline feb. ℥j., 3to. horis.

22nd, 9 a.m.—Passed a restless night; pulse 100; thirst; much pain and hiccup; pain very severe on pressure; slight tympanitic resonance.

Repeat hirudines xx., to be kept bleeding by means of spongio piline. Ppt. calomel and opium, 2nd horis.

8 p.m.—Leeches bled freely; pain rather diminished; there is less tympanitis, and the tenderness on pressure is more circumscribed, being confined to the epigastrium and left hypochondrium; pulse 110; still great thirst.

23rd, 9 a.m.—Pain still continues in the left side; can bear pressure rather better; no evacuation from the bowels; the breath smells slightly of the mercurial fætor.

Habeat haust. olei ricini omni tertia hora.

2 p.m.—The bowels have not been relieved by the castor oil. Administered an enema, consisting of a pint and a half of thin gruel and an ounce of ox gall; this induced a speedy and copious evacuation from the bowels.

8 p.m.—Bowels relieved three times since the enema; abdomen softer; the general tenderness much less; pulse 100; less thirst; expresses herself more comfortable, though weak.

Ppt. Calomel and opium; emplas. lyttæ hypochond. sinistro.

24th, 9 a.m.—Has passed a tolerably comfortable night; free from violent pain; little sleep at intervals; tongue moist; pulse 100; abdomen much less tender to the touch; indeed she bears pressure well, except in left hypochondrium and epigastrium; abdomen softer; gums slightly tender. Pt. calomel and opium nocte maneque; mist. saline Feb. ab autea.

8 p.m.—Much the same; bowels relieved during the day; to have morph. hydroch. gr. 1-3 hora somni.

25th.—Had some comfortable sleep during the night; pulse 100; tongue moist; coated up the back; bears pressure all over the abdomen well, except in the old spot, without evincing any pain. Pt. medicamenta and haust. sedativ. hora somni.

26th.—Much the same; ptyalism is produced.

27th.—Had some pain in bowels during the night, which have not been relieved since the 24th; no increase of tenderness; habeat ol. ricini ℥ij. 2nd horis douce alyus respondent.

8 p.m.—The second dose of oil operated very freely; in other respects very comfortable.

28th, 9 a.m.—Has passed a very uncomfortable night, in consequence of powerful action of the bowels; has been compelled to use the bed-pan almost constantly; considerable collicky pain and tenesmus; has passed a large worm (tenia solium). ℞ solut. morph. hydroch. ℥j.; conf. aromat. gr. x. aquæ font. ℥j.; M. ft. haustus.; tertia quaque hora sumenda; omit calomel and opium.

8 p.m.—The draughts have quieted the action of bowels and tenesmus; has had some sleep during the day.

29th.—From this date she gradually became more debilitated and emaciated; lost all appetite; suffered from heetic flushes and loss of sleep; bowels very obstinate. As there were no acute symptoms present, except the lancinating pain in the left side, which recurred at intervals, she was placed upon a light tonic plan of treatment, with anodyne at bedtime, and counter-irritation to the seat of pain. She soon refused all medicine, except the anodyne at night, which soothed her. She continued in this state, becoming gradually more emaciated, until

April 14th,—When she had an attack of agonising pain in the left hypochondrium; cannot fetch a deep breath or move in bed; states that she has been unable to lie on either side for months, in consequence of a dragging sensation in left side; at this time an evident fullness appeared under left false ribs, pushing them out; great tenderness on pressure, an indistinct fluctuating elastic feeling is conveyed to the touch; the fullness extends to the centre of epigastrium transversely, and as low down as a line drawn midway between the umbilicus and ensiform cartilage; a hardened mass, about the size of a pigeon's egg, can be distinctly felt in centre of epigastrium, exquisitely tender to the touch; percussion yields a clear, almost tympanitic sound, except over the hardened spot; has frequent rigors; states that ever since she has suffered from the violent paroxysms of pain, the attacks have been preceded by rigors and faintings. To have emp. lyttæ lateri sinistro.

15th.—The blister gave some relief to the pain; in other respects much the same.

18th.—Has appeared better since the blister; rigors very frequent; hectic flushes in evening; appetite a little improved; partakes of oysters for dinner, and a little chop, minced occasionally; states that the pain is not increased by food now; bowels more regular; evacuations healthy; tongue clean; pulse 90.

19th.—States she feels better this morning; lay very tranquil during the night, but did not sleep, which she attributes to the composing draught. Tongue clean; bowels open; pulse 90, soft. The hard tumour about the centre of epigastrium more defined this morning; projects in this spot; so highly tender, as to preclude the possibility of accurate manual examination. There is no pain or tenderness all over the right hypochondrium; the edge of the liver can be felt immediately under the margin of false ribs; not at all painful on pressure; it does not extend into the epigastrium; states that she has never suffered pain about the region of the liver, nor has she ever had the characteristic sympathetic pain in the shoulder.

To apply spongio piline to the tender region.

26th.—Since the last report she has suffered much from the weight and dragging sensation in the left hypochondrium; has had frequent rigors and hectic in the evening; the projecting spot in the centre of the epigastrium yields a fluctuating sensation to the hand. I, therefore, punctured it with the lancet; as, however, no fluid escaped upon pushing the lancet to some depth, I desisted, fearing least adhesions might not have formed with the abdominal walls. I considered the safest plan to make a moderately deep incision, so as to afford an easier mode of exit for any contained fluid, rather than rashly introduce an instrument to any distance in the abdominal parietes. To continue poultice.

27th.—My kind neighbour, Mr. M'Nab, of Epping, met me in consultation, and gave me the benefit of his opinion in the case. He fully acquiesced in the propriety of puncturing the tumour, suggesting, that the bowels should be emptied by an aperient previously.

Habeat haust. aperias statim.

28th.—Bowels opened twice from the aperient draught; has passed a very restless night, dreading the lancet. The fluctuating tumour in epigastrium was punctured with a small trocar. About a pint of dirty-coloured puriform fluid escaped through the trocar intolerably offensive. There was also a free escape of gas, which I concluded had been secreted by the walls of the abscess, and did not escape from the intestines.

A linseed-meal poultice to be applied to the side. Morphiæ hydroch. gr. 1-3rd horæ somnil.

29th.—Has been very comfortable since the tumour has been punctured. On being raised to the erect position in the night a quantity of puri-

form fluid escaped from the puncture. Her husband says quite a pint. Upon removing the poultice this morning fully half a pint of fluid escaped, intolerably fætid; complains of feeling faint; a short dry cough first made its appearance in the night.

To have wine freely.

℞ Quiniæ disulph. gr. i.; acids ulph. dilut. ♏. xx.; aquæ font. ad ℥iss.; f. haust. 4t. horis.

May 1st.—Was very faint during the night; no sleep, which she attributes to the dry irritative cough; abscess discharging freely, less fætid; bowels open by castor-oil; skin cool; pulse 90.

Continue wine. To have a mutton chop and a glass of ale at her earnest request for dinner.

2nd.—Much the same; abscess discharges freely when in the erect position, very offensive; pulse 90; tongue clean; cough still very troublesome; percussion resonant all over the chest; respiratory murmur clear and normal; no expectoration.

6th.—Has been much the same since my last report up to the present time. Abscess discharging freely when in the erect position; appetite good; tongue clean; pulse 90; bowels regular. This morning I was summoned, in haste, by her husband, who stated that she appeared to be dying from suffocation. On my arrival half an hour afterwards she had rallied somewhat. Having expelled about a teacupful of fætid purulent matter, exactly similar to that which escaped from the epigastrium by a violent convulsive fit of coughing; she was much agitated, fearing immediate death. I learned that she first began to expectorate slightly about eleven o'clock last night, which continued during the night until the present seizure. The discharge has ceased from the puncture in the epigastrium; percussion resonant over the whole chest; large crepitation over the whole of left side behind; respiratory murmur natural on the right side; pulse 120, irritable; respirations hurried and gasping.

To wash the mouth frequently with a dilute solution of chloride of lime: wine *ad libitum*.

7 p.m.—Has expectorated the same fætid pus all day; occasionally has a fit of convulsive coughing, when she brings up the fluid by mouthsful.

℞ Morph. hydroch. gr. 1-3rd; 3 tia. quaque horæ done somnus supervene.

7th.—Slept but little on account of the cough and hectic fever; still expectorates the same fluid; cough less convulsive; voice very hoarse, speaks in a whisper; has completely lost her taste for food in consequence of the offensive taste in her mouth constantly.

8th.—Much the same; bowels confined; to have an aperient pill and draught.

10th.—Cough very troublesome during the night; about 5 a.m. it became violently convulsive in character, accompanied by violent retching. The fætid expectoration was passed in mouthfuls, which continued till 10 a.m.; her friends say that she has expectorated quite a pint, though the quantity cannot be accurately determined, as the fluid is received in napkins; she is now (11 a.m.) very much exhausted; speaks in a whisper; eyes sunken, countenance pinched; pulse quick and thready; does not return her wine or beef tea by vomiting.

Continue wine and morphia.

12th.—Was very delirious during the night, which her friends attribute to the anodyne draughts. Bowels opened yesterday. Is talking very excitedly this morning. Still coughing up the same fætid matter. There is a slight discharge from the opening in the epigastrium. Her state was now very distressing; she could get very little rest in consequence of the incessant cough. The fluid which escaped by the mouth appeared to be very irritating, as the lips and chin were excoriated and painful, and the fætid taste in the mouth entirely deprived her of any desire for food. To give beef tea, (if possible,) instead of so much wine.

21st.—Since last report, has continued much the same. The expectoration, and discharge from the puncture in the epigastrium, still continue, though less offensive in character, and more healthy in colour. Appetite very bad; is supported mainly by porter and any article of food which she can fancy. Much harassed during the night with cough and hectic fever. Has taken two grains of sulphate of quinine twice a day since last report.

25th.—She has sat up in an easy chair, supported by pillows, several hours daily since my last report. I recommended the erect position to be adopted as much as possible, with the view of affording the pus a greater tendency to escape by the orifice in the epigastrium, than to pass through the bronchi. The puriform matter certainly diminishes in quantity, is less offensive, and more healthy in character. No pain. Tongue clean. Complains chiefly of exhaustion. Appetite slightly improved. Takes porter and quinine regularly.

May 30th.—Has continued much the same since last report; the cough very troublesome, and expectoration annoying: this is far more troublesome when in the recumbent position; when the trunk is raised the discharge escapes much more freely from the epigastrium; the discharge is certainly less fætid and much better in colour. I directed her to be supported the greater part of the day in an easy chair, and to have a bed rest during the night, so as to support the trunk.

To continue tonics and full diet.

June 19th.—Has gradually improved since my last report, The discharge is certainly diminished in quantity, both through the mouth and the orifice in epigastrium, and is much improved in character, having lost the dirty colour and fætid odour. To-day, the orifice at epigastrium appears closed; there has been no discharge from it for three days; very little puriform matter is expectorated, though the cough is very harassing and irritative in character. To have the following for the cough.—

℞ Acid hydrocyanici (Scheele's), ♏ij.; mist. amygdal. amar., ℥j.; m. ft. haust. tertia quaque horæ sumend.

21st.—The cough was very little allayed by the above prescription; the orifice in the epigastrium re-opened yesterday, and a considerable quantity of pus escaped; since this has occurred scarcely any has been expectorated; appetite good; bowels open regularly.

July 6th.—Has been going on very favourably since last report; discharge very slight; cough less troublesome; no pus expectorated. To leave home to-morrow and visit some friends.

27th.—Returned home last evening, in consequence of having felt worse; she was so much better during the first part of her visit that she was induced to take too violent exercise; had several rigors yesterday, and there was more discharge than for some time past. At present there is all the symptoms of an ordinary catarrh; much tenderness over the margins of the false ribs, extending from the epigastrium to the spine. Bowels confined three days. To have ℥iss. of senna mixture immediately, and repeated every three hours till it operates freely; a linseed-meal poultice to the painful side.

28th.—Feels better this morning; bowels opened three times; the feverish symptoms sensibly diminished; cough troublesome; still much pain and tenderness in left hypochondrium.

Emp. lyttæ lateri sinistro. ℞ Pulv. Jacobi gr. iij. u. maneque; mist. saline feb. ℥iss. 4to. horis.

29th.—Has derived much relief from the blister; expresses herself quite comfortable this morning; purulent discharge; it was arranged that she should visit Ramsgate.

August 23rd.—Returned home yesterday; bore the journey well; there is a marked improvement in her appearance; there has been no discharge from the orifice at the epigastrium for more than a week; states that she feels herself much stronger, and far more comfortable about the original seat of pain; hopes the orifice at epigastrium is closing; expectorates but little; bowels act regularly every day, which has not been the case for years; appetite good.

From this period until the termination of the year, she was frequently from home visiting her friends in various localities, as I advised change of scene to divert her attention. I therefore only saw her at considerable intervals. She, however, gradually progressed, gaining health and flesh; the discharge from the epigastrium gradually ceased, and also the expectoration; she was much inconvenienced by a dragging sensation in the original seat of pain, extending along the margin of false ribs; this dragging was most felt when going up stairs, or moving her body suddenly round, and appeared to me, from her description, as if the walls of the abscess had formed adhesions which any exertion put upon the stretch.

Jan. 7th, 1850.—My patient now appears perfectly well; she has not expectorated any purulent matter for more than a month, and there has been no discharge from the orifice in the epigastrium for some time past; she expresses herself as feeling better than she has been for years past; appetite good; bowels act regularly, without the aid of medicine, and she takes plenty of walking exercise, without inducing fatigue.

Remarks.—This case having extended over so long a period, I have been necessarily compelled to condense it somewhat from the notes in my case-book. I have, however, given its leading features as fully as possible, so that my professional brethren may draw their own inferences from the perusal of its history. The diseases of the spleen are so rare, and so slightly touched upon by medical authors, that I had some hesitation at the outset in determining upon this organ as the seat of disease in the present instance, and a reference to standard medical works aided me but little. Abercrombie alludes but slightly to diseases of the spleen, and Dr. Watson, in his admirable lectures, passes them by with a bare mention. I feel, however, that the facts detailed in the above case fairly bear me out in my diagnosis; the pain which had existed for some years, at intervals, in an aggravated form, so as to favour the supposition of malignant disease, was always referred to the region of the spleen. I questioned my patient narrowly if she had suffered from ague, knowing how frequently congestion of the spleen exists in this disease, followed by chronic enlargements; *post-mortem* examinations in such cases frequently disclosing the spleen filling the greater part of left side of the abdomen, its texture quite broken up, and the interior filled with a tarry fluid. She distinctly stated, however, that she had never suffered from ague. I am of opinion that chronic inflammation had been long going on in the spleen, and that suppuration had ensued. The attack of peritoneal inflammation, which occurred on the 20th March, 1849, I imagine had the effect of producing adhesion between the walls of the abscess and the abdominal parietes; thus preventing the fluid contained in the abscess from escaping into the cavity of the peritoneum,—a result which would have beeen necessarily fatal; on the contrary, the abscess pointed in the epigastrium, where the least resistance was offered to its exit. Such an example of the conservative efforts of nature is often beautifully illustrated in abscesses of the liver. As soon as an *external* outlet had been formed for the escape of the fluid, I was very sanguine as to the ultimate welfare of my patient; when, however, a communication was formed with the bronchi, her condition became one of the greatest peril. There existed at this time an enormous sinus, one extremity of which was in the epigastrium, and the other communicated with the bronchi. The constant drain upon her already exhausted system rendered a favourable result hopeless. Contrary to my anticipations, however, the case has terminated most favourably, and certainly is a most gratifying proof of the "*Vis medicatrix Naturæ.*"

Ongar, March 12th, 1850.

ON THE RESPECTIVE VALUE OF LIME-JUICE, CITRIC ACID, AND NITRATE OF POTASH, IN THE TREATMENT OF SCURVY.

By ALEXANDER BRYSON, M.D., R.N.

Although scurvy, in its more severe forms, seldom occurs now in the naval service, still it is occasionally met with in vessels on foreign stations, where it is difficult or impossible to procure for the men a change of diet every two, three, or four months,—that is, a daily ration of fresh meat, with a due proportion of vegetables or fruit, for several days in succession, in lieu of their wonted allowance of salted meat, flour, suet, and peas, particularly if, at the same time, they (the men) happen to be exposed to the influences of other causes prejudicial to health, such as a humid atmosphere, the want of exhilarating exercise, and mental depression, together with a want of space and ventilation in those

parts of the ship where they generally mess, sleep, and spend their leisure hours. Scurvy, therefore, is still a disease that demands a considerable share of the naval surgeon's attention, more especially as it may come under his notice in an aggravated form, while in charge of prisoners on the passage to New South Wales. The best means of preventing it, and the remedies most useful in its cure, are, consequently, objects which have, for a series of years, excited considerable interest in the minds of the Medical Officers employed in this latter responsible service.

The difficulty, or, rather, impossibility of storing up a sufficient proportion of esculent vegetables for a long voyage, in a vessel with a large number of men on board, has led to the substitution of other articles likely to answer the same purpose and which occupy comparatively little space, such as lime-juice, vinegar, pickled vegetables of various kinds, and, within the last few years also, preserved peas, carrots, and potatoes. With respect to medicines for preventing and curing scurvy, besides the common lime-juice in general use, the nitrate of potash has been represented as an agent of considerable value, but more as a remedy, when the disease has been produced under the usual privations, than as a prophylactic. The crystallised citric acid has also been used, both as a remedy and a preventative; its more portable and less bulky form has been held to be an advantage which lime-juice does not possess. It, therefore, became desirable to ascertain, with some degree of certainty, the relative value of these agents, from data which might be subjected to the test of comparison.

The Director-General of the Medical Department of the Navy accordingly, several years since, issued directions, as opportunities occurred, to the surgeons-superintendent of convict ships, to the effect, that if scurvy made its appearance during the voyage, they were to try the relative value of lime-juice, citric acid, and nitre as remedial agents; and, that the results might be the more clearly ascertained, they were directed to place the scorbutic patients, as they presented themselves, in three divisions, each division possessing cases of parallel severity, and presenting, as nearly as possible, similar symptoms. To one set lime-juice was to be administered, to another citric acid, and to the third nitre; the diet, exercise, and freedom from restraint, of each division, were to be the same, and the effects of the remedies to be frequently noted.

From various causes the results obtained were not so satisfactory as might have been anticipated. In fifty-six vessels, the Surgeons-Superintendent of which were furnished with these instructions, there either did not occur any cases of scurvy, or they were so few, that the remedies could not be exhibited with the view of testing their efficacy. In fifteen, in which a sufficient number of cases occurred to admit of a trial, the lime-juice had been issued daily, as customary, to the whole of the prisoners and guard, beginning on the fifteenth day of the voyage. It may therefore be supposed, that, like most other remedies, by long-continued use it would partly, if not entirely, lose its influence on the system; and, consequently, it must have been administered in these vessels at a great disadvantage, when it came to be used at an advanced period of the voyage in competition with the nitre and citric acid, admitting for the moment, that they are both possessed of remedial qualities in the treatment of this disease. There are also a few instances in which the experiment was completely vitiated; the remedies, possibly from a misconception of the instructions, having been given in combination, either one with another, or with other therapeutic agents. There were, however, two vessels hereafter to be noticed, in which the lime-juice was not given, as a prophylactic at least, until the scorbutic diathesis was fully established.

In ten vessels, in which the disease made considerable progress, and in which the trials were conducted according to the instructions, the conclusions arrived at were as follow:—The different vessels, for the sake of brevity, may be numbered. In the first the citric acid was considered to be the most effective. The nitre, which appears to have been sometimes combined with lime-juice, although it was also given separately, disagreed with most of the patients, causing irritability of the stomach, and relaxation of the bowels to such a degree, that it was necessary to combine opium with it. In the second, it was supposed there was not much difference between the remedial action of the citric acid and nitre; both were considered to be preferable to the lime-juice. In the third, the citric acid and lime-juice appeared to have the power of arresting the progress of the disease, but not of curing it. The nitre seemed to impair the powers of digestion and assimilation, and was therefore considered to be injurious. In the fourth, the curative effects of the citric acid and lime-juice were about equal, the former being preferred by the patients as being more palatable; those to whom the nitre was given, complained of its acting on the kidneys, and causing constipation of the bowels. In the fifth, (the only vessel in which it may be said the experiment was fairly tried,) the usual allowance of lime-juice was withheld from the prisoners, in order that the effects of each remedy might be the more clearly observed, if scurvy occurred on the voyage. It consequently made its appearance before the ship had crossed the equator. Forty-five patients, in all stages of the disease, were selected and treated in three divisions, according to the instructions. The plan was rigidly followed out for a fortnight, when the nitrate of potash was found to be acting so injuriously, and to be taken with so much reluctance, that its use was altogether abandoned. All the patients in the division to which it was given rapidly lost ground, while those in the other two improved or remained nearly stationary. The lime-juice was supposed to have a slight superiority over the citric acid. In the sixth, the disease, under the potash plan of treatment, was found either to be aggravated or to remain stationary. The lime-juice, although it had been daily administered as a preventive during the early part of the voyage, when given more frequently and to a greater extent, was considered to be more effective than the citric acid; but both were useful. In the seventh, in which the remedies hardly had a fair trial, each division improved gradually, but that to which the nitrate of potash was given, the fastest. In some instances, in which it disagreed with the patients, they were removed to the lime-juice list. The dose was fifteen grains per diem. There were altogether thirty-one cases of scurvy, which were cured in a little more than three weeks; they could not, therefore, have been of a very severe character. In the eighth the remedies were considered to be of equal value. The experiment, however, was interrupted at an early stage, by the arrival of the vessel in port. In the ninth, the daily allowance of lime-juice was not issued, consequently, as in the fifth, the disease made its appearance before she crossed the equator. Thirty-four prisoners were arranged in divisions, and placed under treatment on the 6th of September, 14 upon lime-juice, and 10 on each of the other remedies. On the 11th day of the treatment they were examined, when it was found, that out of the 14 on lime-juice, 3 were well, 9 better, and 2 stationary. Of the 10 on citric acid, 3 were well, 5 better, and 2 stationary; and of the 10 on nitre, 2 were well, 7 better, and 1 stationary. It would thus appear, that the patients improved under the use of all the remedies, the advantage being slightly in favour of the vegetable acids. Lime-juice appears to have been given, instead of the nitre, in several cases in which the latter disagreed. In the tenth ship, the nitrate of potash and citric acid, for the first few days, appeared to be acting favourably; but, as many of the patients, in each of the three divisions, began to get worse, the use of the medicines singly was abandoned. Afterwards they were given in combination, but without any satisfactory result.

The diet of the patients in all these trials was altered, and considerably improved by the substitution of preserved meats and soup, instead of salt meat, to which were added puddings of rice and flour—an increased allowance of tea and sugar, together with port-wine and sago occasionally, as they seemed to be required; thus rendering it exceedingly difficult in some instances, and altogether impossible in others, to arrive at any thing like a proper estimate of the positive abstract advantages attributable to the different medicinal and dietetic agents employed. There seems to be, however, little reason to doubt judging from the results in these trials, and from others which were not so well conducted, that the alkaline salt has not the antiscorbutic properties which have been ascribed to it; while, from its nauseous, mawkish taste, and injurious effects on the system generally, unless in very minute doses, it would be worse than cruelty, under any circumstances, to persist in its exhibition in this disease, either as a prophylactic or as a means of cure.

The other two remedies, when given in combination with wine and sugar, in the form of lemonade or sherbet, form a beverage highly prized by the patients in every stage of the disease. Their relative value as remedial agents, if an opinion may be formed from these experiments, seems to be nearly on a par, although it is necessary to bear in mind that the lime-juice might probably have acted with better effect, or at all events its action would have been more apparent at the time of trial, had it not been that its influence in exciting the digestive organs to a more healthy formation of chyle, was greatly diminished from long-continued use previously. Citric acid as a preventative has hardly yet been fairly tried; neither has either of these remedies, much as they are extolled, been tried without sugar,—an article of itself highly nutritious, agreeable to the palate, and generally much relished when the appetite begins to flag, under the protracted use of the ordinary sea rations. It seems, therefore, by no means improbable, that the effects of both remedies have been considerably enhanced by the sugar, in combination with which they were given. The latter, in fact, is not only a nutritious and wholesome substance, but, like salt, it acts as a condiment when combined with certain other articles of food, rendering them not only more acceptable to the palate, but more suitable to the organs of digestion and assimilation.

In consequence of the apparent occasional failure of lime-juice, when given as a prophylactic on long voyages, it has been somewhat hastily assumed by one or two writers, that it has not the properties attributed to it. The following circumstances, however, would lead to a very opposite opinion. In the year 1842 fifteen vessels left England with prisoners for Van Diemen's Land; in three of these only did scurvy assume anything like a severe form. This naturally led to the inquiry, whether there was anything different or peculiar in these vessels; in the physical condition of the men when they embarked, or in their diet and mode of living afterwards, to account for the appearance of the disease in them, and not in the others; for it was hardly possible to suppose it could be merely the result of chance. The provisions were obtained exclusively from the stores of the Royal Naval Yard at Deptford, and it may, therefore, be supposed they were in every respect the same, and of good quality. The vessels were fitted up and ventilated much in the same manner, and the prisoners, who were obtained from similar sources, and to all appearance in the same condition of health, fit for the voyage when embarked, occupied relatively the same room in each; the provisions and "medical comforts" were issued in the same manner in the whole of the fifteen vessels, with two exceptions; in these, as previously noticed, the usual allowance of lime-juice and sugar, one ounce of each per diem for every man on board, for reasons that need not be stated here, were withheld from the prisoners during the early part of the voyage. In both vessels scurvy appeared soon, and attacked a large proportion of the prisoners with great severity, rendering it necessary for both the vessels to put into the Cape of Good Hope for refreshments; while in twelve of the fifteen vessels, several of which made the passage to Hobart Town in from 110 to 140 days, without touching anywhere, there were but few cases, and these were of trivial importance. In the other vessel, however, in which lime-juice was issued in the usual manner, the disease broke out early, and during the passage, which, nevertheless, was made without touching at any port, it acquired considerable severity. Were it not for the appearance of the disease in this vessel, it might be fairly assumed that it broke out in the two others in consequence of the non-issue of lime-juice; and, after all, the probability is, that such was the case,—for it would appear that, in her, the

prisoners, contrary to the usual practice, were only permitted to come on deck for a few hours every day,—a circumstance in itself sufficient to establish the scorbutic diathesis, independently of the want of vegetables and a fresh meat diet.

On a fair view of the question, therefore, it seems but reasonable to infer, that the prisoners in the twelve vessels derived their comparative exemption from the disease, solely in consequence of the greater degree of freedom they enjoyed, and the daily use of lime-juice and sugar; in the two in which they suffered so greatly, that it was in consequence of their having been deprived of their usual allowance of lime-juice and sugar; and in the fifteenth vessel, that they were attacked by the disease in consequence of their close confinement below, in the damp, vitiated atmosphere of an ill-ventilated prison. Hence the inevitable conclusion, that lime-juice and sugar are essentially necessary, as anti-scorbutics, on long voyages.

(To be continued.)

DESULTORY SKETCHES.

By DR. BUSHNAN.

INTRODUCTORY.

The life of a Physician cannot be called joyous. Yet it is not unmixed with occasional gleams that soothe the heart and revive the tone of languid nature in his oft-exhausted frame and overburdened mind. Ardent he must necessarily be in the exercise of a profession which makes so many demands upon his time, on his patience, on his skill, and on the instantaneous application of his tact, to mitigate pain or to save life. It is almost impossible, when engaged in the active practice of his profession, that his mind can ever relapse into that quietness and repose in which the followers of almost every other profession may indulge, without let or hindrance. Not that my readers must conclude, that Melancholy must mark the Physician for her own. I do, however, feel disposed to maintain, that the character of his avocations is such, as to direct and fashion his thoughts and reflections in a mode becoming one whose daily and hourly sphere of action, involves the great issues of life and death. Momentous as these epochs are to every one, they scarcely occupy the thoughts except as distant though probable contingencies; to the physician, however, they are the subject of constant meditation by day, and not infrequently they break upon the silence of his midnight repose.

With such prospects before them, it may seem strange, that so many should volunteer to engage in a profession beset with such perplexities, and the study of which is often pursued at the cost of life; while its practice exposes to no less danger, whether in the lofty palaces of the wealthy, or in the lowly chambers of the poor. Fortunately, however, for society, we enter the Profession at a period of life when the vigorous flush of youth bids us despise the fear of death; and the glowing spirit of youthful existence, rising superior to all obstacles, commands because it deserves success. It is thus the medical man walks fearless amid the pestilence, where

"——————— with his breath he draws
A plague into his blood, and cannot use
Life's necessary means, but he must die;"

and finds the bright consolation of having conscientiously discharged his duty his chief reward. His is not the glory that awaits the coronet,—that is heralded in Gazettes with the approbation of Royalty,—or rejoices in the gratitude of a nation's voice, tendered in the thanks of its most august assembly. His is not the glory that coruscates in the flushed pride of martial hosts rejoicing amid the carnage and the desolation of the fallen foe. His is not the glory that is more glorious where the destruction is most complete, the desolation most absolute,—when the silence of death reigns where but yesterday both life and hope were buoyant. But I must pause, lest I am carried too far in recounting the psans of our art with no unwilling pen.

But, whatever are the disadvantages of the study of Medical science, it is obvious that there are men whose bent of mind leads them, almost intuitively, to the contemplation of the human frame, both in health and in disease, in the same way as Nature inspires some of her offspring with the divine gift of poetry, or the sister art of painting; or imparts to others the no less sublime powers by which a Handel or a Beethoven, a Weber or a Mendelsohn, lead captive the souls of men by the power of music.

To causes of this nature we probably owe, in all the departments of science, those master-spirits who have struck out new paths for themselves in the early dawn of the sun of knowledge. Nor can I, for a moment, hesitate to believe, that the great father of medicine—the old man of Cos—engaged in the study of the healing art, from no other incentives than these. Succeeding ages produced successors to him, and no unworthy rivals, in Celsus, in Galen, in Aretæus, in Æsculapius: while our own era can boast of its Boerhaave, its Hoffman, its Cullen, and its Brown, its Hufeland, its Pinel, its Laennec, and, to crown all, its immortal Hunter. These were the band, the *juvenum manus ardens*, who respectively gave to each period the type of their own mind; and, hurrying forwards in the van-guard of the phalanx of discovery, have bequeathed to us the stimulus of their names to excite us to enlarge further the field of medicine. These, and such as these, rose superior to all considerations of emolument; with them the labour was more than its own reward. Fortunate, therefore, is the present state of our science. Though enriched by the researches of so many labourers in every one of its departments, to the humblest the field is still open for observation, and even for discovery. Out of the accumulation of observations during a decade of centuries, it has attained the broad, ample, and expansive condition which it now presents. First principles have been laid down and established to guide and direct us in the progress of research, by the aid of which we may cull new stores of facts to weigh the suggestions and test the experience of bygone days.

As, indeed, general knowledge extends, its applicability to each department of the great circle of the sciences, becomes daily more and more apparent, and the close links which connect it in one harmonious whole, become daily more developed and decided. There are few persons, therefore, who need despair of being capable of assisting in the great onward progress of the advance of science, more especially of that which embraces the cure and prevention of disease. Facts are open to every one, though their exact import may not always be so readily discovered. We may not all be able to deduce a principle from them, or to construct a theory upon them. But a simple observer is, perhaps, the most trustworthy witness of a fact; while there is no deficiency of minds of sufficient calibre to apply them to the confirmation or deduction of general principles.

Having, then, all these circumstances before me, an apology is hardly required, that I propose to offer to the Profession those desultory comments and reflections which have suggested themselves to me in the course of a somewhat extended and varied experience of the theory, as well as of the practice of our art, both at home and abroad. I have seen, though I believe the zenith of my days have not yet gone by, not a few doctrines ushered into existence, heralded through the usual channels, and then decline insensibly, to rest quietly in the tomb of the Capulets. Others, again, I have noticed, meteor-like, flit across the Medical horizon, to vanish into the unsubstantial nothingness whence they sprung. A few have maintained their ground; and these, sadly shorn of their pristine bloom and original proportion, have become amalgamated with the great body of the science.

Much time I have seen spent upon some theories, which seem to have been broached for no other object than to prove the ingenuity of their authors; they have served, undoubtedly, as an introduction to the display of talent, but they have failed to establish or to confirm any new proposition. Fashioned as the circle, they have terminated where they commenced, and are to be considered more as exercises of the schoolman than the problems of the philosopher. But, amid all these conflicting testimonies, there has nevertheless always been an onward progress in the Science of Medicine, of which no better proof can be desired, no more satisfactory evidence adduced, than the improved condition of the public health, and the greatly increased value of human life.

I do not pretend to be the apostle of any dogma, nor the abettor of any special medical creed. Experience has taught me, that while, like "Alps on Alps," theories arise, so there is always some basis—however strangely distorted may be the superstructure it supports—for the positive or negative proposition it is intended to substantiate. And hence my motto—

"Nullius addictus jurare in verba magistri,
Quo me cunque rapit tempestas, deferor hospes."

I confine myself to no plan; I restrict myself to no formula. I launch my observations freely amid the great ocean of opinion, and if I may not be original in my remarks, I will, at least, endeavour to avoid the shaft which might justly be attached to ignorance or credulity. I will offer facts, and these so far only as I have seen them and judged them. The phases of public opinion are ever varying. I fancy I see in them something of a periodic type; others may descry a positive series of repetitions. This may be said of some; but still, I contend, there are others of a more important nature, depending on phenomena which I will endeavour further to unfold, and that, secure of all alarm at any apprehension of that monster, to whom we are all so apt to bow,—

"—— opinion, an omnipotence, whose veil
Mantles the earth with darkness, until right
And wrong are accidents; and men grow pale
Lest their own judgments should become too
bright."

In a subsequent paper, I propose to offer some general observations on the present state of the practice of medicine. The succeeding comments on monographs will embrace some particular points of theory; they may occasionally be didactic, but they will be chiefly of a practical character, for I desire to harmonise as closely as possible with that species of philosophy which the Benthamian lore well expresses by the term UTILITARIAN.

7, Nottingham-place, Regent's-Park, Feb. 1850.

HOSPITAL REPORTS.

ST. BARTHOLOMEW'S HOSPITAL.

TALIPES EQUINUS.

We last week reported two cases of club-foot which were operated on at St. Bartholomew's Hospital, and we have again had the opportunity of witnessing the practice of its surgeons in the treatment of this disease. They evidently discard merely mechanical appliances, at least where the affection is considerable, of long standing or congenital, as ill adapted to produce a satisfactory result. In those cases in which the deformity is but slight, they may be indicated, provided the foot can be brought and kept in its position without difficulty, but even in these the effect is uncertain, tedious, and difficult, the surgeon being frequently obliged to resort to the use of the knife. We are inclined to think that the cure of almost all the cases which come under the care of the hospital surgeon would be accelerated and rendered more effectual and permanent by the previous division of those tendons or fascia which tend to draw the foot out of its proper position. In the first of the cases, a child under the care of Mr. Lloyd, the deformity appeared to depend principally upon the contraction of the inner division of the plantar fascia, as shown by its tightening on straightening the foot, the bending of the toes, and the great arching of the sole. The knife, held flat, was passed in at the junction of the inner and middle thirds of the plantar fascia, the former of which, being tightened by an assistant, was then divided. The tendo Achillis was subsequently divided, when the foot and toes could readily be moved in their proper directions. A pad of lint, secured with a strap of plaster, was placed on each of the punctures, and the child removed to bed.

The other was a patient of Mr. Lawrence's, who a short time before had divided the tibialis anticus and tibialis posticus muscles, and now completed the operative part of the treatmont by cutting the tendo Achillis. Chelius and Stromeyer think the

division of the tibialis posticus unnecessary, as they consider it to have no influence in the formation of club-foot. In this child the division was attended, as far as we could judge, with benefit, and most surgeons, we believe, still continue the practice when the foot is much bent inwards.

SCHIRROUS DISEASE OF MAMMA.

A woman who had for some time suffered from a tumour in the breast was next brought into the theatre to have it extirpated, Mr. Lawrence deeming it a cancerous growth. The depression of the nipple and the puckering of the skin around it indicated almost certainly the nature of the disease. We have, by dissection of two diseased breasts, satisfied ourselves of the correctness of the observation made by Sir Benjamin Brodie in his Lectures on Pathology and Surgery, that it depends on a small fibrous-looking process, which connects the tumour with the skin. (a.) The glands in the axilla were not enlarged, nor did the cancer, which was imbedded in a mass of fat, involve the pectoralis muscle, over which it lay.

Mr. Lawrence made some practical observations at the termination of the operation, as to the propriety of removing the entire gland in cases of this nature, and not being led away by the apparent health of the remaining tissues; for, on examination, a second scirrhus mass was found at the back of the removed organ—not obvious at all to the touch: other parts of the gland possibly going into the same condition. The use of chloroform had now made such dissections easy; and, where it came to be a question of operating at all, he was distinctly of opinion every bit of the gland should come away. He was fortified in this view of the matter, by all he had seen of these melancholy cases; the disease was so completely in the system, and the analogous character of all the parts of the gland so marked them out a prey to it, that except the whole breast was taken away at the beginning it would have to be done a second time. An instance in point had just occurred in town, in which he was consulted. A lady from Scotland had her breast operated on in France, from some idea on the part of the French practitioner, (who otherwise managed the case exceedingly well,) that the scirrhous degeneration did not extend; the latter alone was cut out. For a long time an unhealthy gleety discharge continued; the vicinity of the wound then took on a decidedly scirrhus character also, and, in conjunction with another London surgeon, it was deemed at last advisable to remove the entire breast. This was done, and the lady was now free of her old and irksome disease. The mass removed like the one now under consideration was, throughout, full of evidences of the same disorder; but the lady had gone back to Scotland, after having the operation properly completed.

(a) In many cases of schirrous tumours of the breast, the skin is drawn or tucked in, over the tumour, so as to produce the appearance of a dimple in it. Where this dimple in the skin exists, you may be almost sure that there is a schirrous tumour in the breast beneath it, and, on examination, you will feel it with the finger. But on what does this appearance depend? In a case, which I dissected very carefully, I found a narrow process or elongation of the disease; perhaps half an inch in length, passing from the tumour through the adeps into the skin, and connecting the skin and tumour to each other; in fact, the dimple indicates that the disease is not confined to the breast, but that the skin is already contaminated.

GUY'S HOSPITAL.

AMPUTATION OF THE SHOULDER JOINT.

On Tuesday, the 12th inst., we had the opportunity of witnessing an interesting case of a young woman, who had long been under treatment at this Hospital, and in whom Mr. Bransby Cooper had determined on the removal of the left arm at the shoulder joint, for necrosis of the upper portion of the humerus, and suspected disease of the articulating surface of the head of the same bone. Every effort had been made to save the limb, but without success. The upper arm was shortened and thickened, presenting several cicatrices, with a large open wound at its outer and upper part, whence a portion of necrosed bone had been removed a short time since. Considering the severity of the disease, and the length of time she had suffered from it, the woman looked better than might have been expected.

Mr. Cooper having the patient placed on a high chair, with her arm supported by an assistant, another pressing on the subclavian artery, commenced by making an incision first along the posterior border of the deltoid, and then, with the left hand, down its anterior margin. The knife was now passed behind forwards, between the muscle and the bone, uniting the previous incisions by cutting downwards to the apex of the muscle. The flap being drawn upwards by an assistant, Mr. Cooper dissected it back to the head of the bone, and, dividing the capsular ligament, readily disarticulated the humerus; the head of which was turned outwards, by depressing the elbow. The inner flap was made by passing the knife through the cavity, and thence from above downwards. The larger vessels were tied, and the hæmorrhage from some of the smaller ones suppressed by torsion. The stump was dressed with lint, and the patient removed. The whole proceeding occupied but a few minutes.

Mr. Cooper observed, that the patient had suffered from necrosis of the humerus for nearly nineteen years. She had for a long time been under the care of the late Mr. Aston Key, who, a year and half ago turned up the deltoid, and removed a small sequestrum from the bone lying beneath this muscle. Only temporary amendment followed, the disease having evidently continued up to the present period. Mr. Cooper a few weeks back, had removed another large sequestrum without much relief to the patient; he had, therefore, at last determined to take away the whole limb, as the only probable means of ensuring the life of the patient, who had latterly exhibited a hectic flush, from the severity of the pain and the constant abundant discharge from the sinuses. The limb was a perpetual annoyance, and prevented the patient entering upon any employment, as she would be able to do if she recovered well from the operation, of which there was no reason to doubt. When the last piece of bone was removed, the inhalation of chloroform distressed her so much that she had determined on the present occasion, rather to remain conscious of the pain than to be again placed under its influence. Mr. Cooper stated that he would have preferred leaving the head of the bone in the socket, as it forms a better stump; but believing that this part was also diseased, he thought it better at once to remove it rather than to chance the necessity of a further operation. The cartilage was found to be ulcerated; a considerable extent of the head being laid bare, the articular surface of the scapula appeared healthy.

REMOVAL OF A MALIGNANT TUMOUR FROM THE LEFT ANGLE OF THE JAW WITH A PORTION OF THE PAROTID GLAND.

Mr. Cooper next proceeded to remove, from the neck of a man advanced in years, a small round subcutaneous tumour, situated below the left angle of the jaw, and covered with dusky red skin. There was a less prominent portion covered with healthy skin, proceeding upwards from this part, and apparently connected with the parotid gland. A vertical incision was first made through the integuments, which were carefully dissected from the surface of the tumour. Its connexions with the surrounding tissues were next divided with the knife, the finger and handle of the knife being used to separate it in those localities where it was less firmly adherent. The lower portion of the tumour was soft and medullary, the upper connecting it to, and continuous with, the parotid gland, was hard and cartilaginous. It was found necessary to remove, with the tumour, the lower half of the parotid gland, and, subsequently, small portions of the surrounding tissues, which were involved in the disease. Two or three vessels required tying during the course of the operation, and, afterwards, some large veins, branches of the external jugular, which bled freely.

UNIVERSITY COLLEGE HOSPITAL.

MALIGNANT DISEASE OF THE KNEE JOINT.

This occurred in a boy, aged 17, admitted into University College Hospital, under the care of Mr. Quain. No history of hereditary tendency to malignant or other disease could be traced, either on the father's or mother's side; both families were, on the contrary, remarkably healthy. The boy has suffered, during the last three months, from a swelling about the left knee joint, which has been enlarging very rapidly, especially of late, an almost daily increase being perceptible. The pain, which he describes as being of a sharp, lancinating character, has become almost constant, and frequently prevents his sleeping at night-time. The knee is swollen to three or four times its natural size. The limb lies on the bed on its outer side, semiflexed, and can be extended but to a very slight degree. The swelling is most apparent in the lower fourth of the femur; it is of a firm, resisting character, and tender to the touch. The joint itself does not appear affected; the stiffness and pain is dependent on the enlargement of the surrounding tissues. Several of the glands in the left groin are enlarged and hard, but not painful. No disease of any internal organ can be detected. The liver appears to be of its natural size. There is no fullness or hardness of the abdomen, indicating enlargement of the mesenteric glands. The boy, however, being naturally delicate, has suffered much in his general health during the growth of the tumour.

On Thursday, March 14, the amputation was performed in the usual way, with a double flap, anterior and posterior, at the junction of the upper, with the middle third of the femur. Several vessels required tying, though, the femoral artery being well compressed by an assistant, there was but little hæmorrhage. A piece of wet lint was placed between the flaps, and the patient removed to bed, to be well watched. Chloroform was administered to the boy previous to his being brought into the theatre.

Mr. Quain observed, that the prognosis in this, as in all similar cases, was very unfavourable. The disease would probably recur ere long in some other part of the body and destroy the patient. He had, nevertheless, felt it his duty to resort to its removal, as giving the boy the best chance of a longer life; and there was, besides, a possibility that the disease would not return. The joint, he anticipated, would be found, as is usual in malignant disease of this part, perfectly healthy. The large quantity of blood which was seen on the floor, arose not so much from the stump, the hæmorrhage having been slight, as from the portion of the limb which had been removed. These rapidly growing tumours being highly vascular, and consequently full of blood.

KING'S COLLEGE HOSPITAL.

ANEURISM BY ANASTOMOSIS.

Two cases of vascular growth, first described by Bell, under the name of aneurism by anastomosis, were operated on by Mr. Fergusson last Saturday. It is well known, as characterised by its generally rapid growth, its being soft and compressible, easily emptied by pressure, and increased by exertion. The skin over the part is usually vascular, though, sometimes, the tumour is so embedded in the areolar tissue as to be detected only by the protrusion of the skin. In such the diagnosis may prove difficult. A case of this kind, where the swelling was situated in the popliteal space, was operated on by the late Mr. Liston, under the impression that it was a fatty tumour. This case is reported in the Medico-Chirurgical Transactions, where the mass is described as having a doughy elastic feel, when the limb was extended, a sensation much resembling the fluctuation, which is produced by deeply seated matter. When the limb was flexed, this sensation was less distinct, and the tumour had more the feel of an elastic solid mass, which was pretty moveable, and might be distinctly raised and separated from the bone.

Of the infinite variety of means that have been suggested for its cure, that which we are about to describe is the one, we believe, almost universally adopted by the hospital surgeons of London, and for the rapidity, certainty, and comparative safety with which it removes the disease, is greatly to be preferred. We refer to the practice of strangulating the vessels by means of ligatures. A needle, armed with a fine cord, is passed through the base of the

tumour, and, if it be of any size, another one at right angles to the first. The cord being seized, either by the forceps or fingers, the needle is withdrawn, leaving in its track a double cord. By tying the several ends of the cord, the part is enclosed, the vessels compressed, and the disease sloughs. To save as much skin as possible, and leave a small cicatrix, as well as to prevent the pain which formerly resulted from the inclusion of the skin in the ligature, it is dissected off from the surface of the tumour, either by a crucial incision, as practised by Mr. Liston, or by a circular or square one in the healthy skin, which is then dissected backwards. It is immaterial which of these methods is used, except the skin be much injected, when the latter is preferable, the operator being able to leave the too vascular portion. With proper care there is little danger of hæmorrhage. The ligatures may be introduced either before or after the incisions are made.

In the first of Mr. Fergusson's cases the growth was entirely encircled by the ligatures, but the other, situate in the neck below the left ear, was of so great a size as might seem to warrant, and even require, ligature of the common carotid artery for its removal. Mr. Fergusson had, however, thought it better to resort to the present proceeding, which would, in all probability, prove successful, though, as from the great size of the swelling, it was advisable only to tie a portion at a time, the treatment would necessarily be protracted, and several operations required

AMPUTATION OF THE FOREFINGER.

A patient of Mr. Fergusson's was brought in with necrosis of the phalanges of the forefinger and metacarpal bone, consequent on an injury he had received from a chisel coated with lime. Severe inflammation was set up, and an abscess formed, followed by foul and unhealthy sloughing of the surrounding parts. Mr. Fergusson observed, that he had been very desirous to save entire the palm of the hand, it being of importance in the man's occupation; but when the finger was removed, he found the head of the metacarpal bone also diseased, and had therefore removed it. The inflammation had extended upwards some little distance along the tendon, which was divided. The bones appeared as if macerated, the soft tissues almost dropping off them. Owing to the unhealthy surface, which was left, he thought it better to let the wound heal by granulation, that thus the sloughs might be thrown off.

WARTY DISEASE OF THE PENIS.

On Saturday, the 16th instant, a man, aged 25, suffering from this disease in an aggravated form, was brought into the theatre, having been previously rendered insensible by chloroform. When admitted into the hospital, under Mr. Partridge, a few days since, the lower half of the penis was greatly enlarged, and presented some characteristics of malignant disease, being ulcerated, hard, and nodulated to the touch. Of its true nature, however, there was no doubt; its history, the absence of sharp, cutting pain, and the freedom of the pus from the fœtid smell of cancerous discharge sufficiently demonstrated the real nature of the malady.

Mr. Partridge commenced by making a circular incision through the skin on the hinder part of the tumour, where it appeared healthy, which he then turned a little backwards. It being desirable to save as much of the organ as possible, a bougie was introduced into the urethra, to point out its situation, while the growth was being pared off from the surface of the penis, the soundness of the mucous membrane on nearly half of the glans seeming to show that a considerable portion of the organ remained healthy. The instrument passed out of the urethra into the diseased mass through one of the numerous openings which were found in the corpus spongiosum when the urethra was laid open. Having pared as much of the corpora cavernosa as retained a healthy structure, he removed the glans, and the other diseased part, by a transverse cut. Mr. Partridge, by the proceeding which he adopted, succeeded in saving much more than he would have been able to do, had he performed the usual operation for amputation of the penis.

Mr. Partridge observed, that the man had laboured under congenital phymosis, leading to the collection of gonorrhœal matter under the foreskin, which, irritating the mucous membrane, resulted in the formation of warty excrescences. The man neglected to pay proper attention to these; they had, consequently, gone on increasing to their present enormous extent. A troublesome stricture of the orifice of the urethra often results from amputation of the penis; to prevent this, he had adopted the plan suggested by the late Mr. Earle, of Bartholomew's, of slitting back the orifice of the urethra for a short distance, turning out the corners, and fixing each by a ligature to the adjoining tissues. This had, in his experience, proved very effectual in preventing a sort of stricture which was usually difficult of cure.

FISTULA IN ANO.

The next operation was on a woman labouring under fistula in ano. She had several growths around the anus, the result of syphilitic disease, contracted some time since. One of these had ulcerated and inflamed, and an abscess in the cellular tissue below formed in consequence. The matter burrowed but a little way by the side of the bowel. Mr. Partridge divided the sphincter, and laid it freely open. It was then dressed with lint.

ST. GEORGE'S HOSPITAL.

PHYMOSIS WITH HYPERTROPHY OF PREPUCE AND SCROTUM.

The enlargement of the scrotum and prepuce in this case had probably been brought on by repeated gonorrhœal or syphilitic attacks, the discharge from which collected within and irritated the foreskin as well as the adjoining parts. It was doubtful whether the thickening of the skin was in itself syphilitic, although the man had been for some time labouring under squamous, probably secondary, eruption in other parts of the body, which is now leaving him. The scrotum, on his admission, was enlarged to nearly three times its natural size but it has lessened considerably under the use of pressure, which could not readily be applied to the foreskin. Mr. Cutler had been induced to operate on this man, not only for the cure of the phymosis, but, especially, because he believed that the constant wetting of the scrotum by the urine was the chief means of keeping up the irritation and consequent thickening of the tissues. The pressure could now be applied with greater likelihood of success. The steps of the operation, which were simply for the removal of the prepuce, do not require detail.

HARE-LIP.

We are induced to notice this very common, as well as easy operation, by Mr. Hewitt, because a simple, and, for the appearance of the patient, very effectual modification, suggested we believe by Mr. Fergusson, was not resorted to. The edges were, in this instance, pared with scissors, which do not allow of the plan to which we allude. It is as follows:—The edge of one side being pared in the ordinary way, the knife is brought from the angle of the fissure downwards, so as to remove the edge of the other flap to within a short distance of the margin of the lip, at which point it is turned inwards to the mesian line, leaving an angular process in this situation. This serves to stop up the gap or notch which is almost always left below the line of union of the hare lip, and forms not only an unsightly object, but reflects somewhat on surgical skill. We have seen several operated on in the way above described, and can, therefore, testify to the important improvement which it effects in the appearance of the patient.

PROGRESS OF MEDICAL SCIENCE.

FRANCE.

[Paris Correspondence.]

LITHOTOMY.

Baron Heurteloup, well-known to your English readers through the lithotriptic campaign, which he undertook many years since in London, has again made his appearance on the Medical stage. After the Revolution of February, it is true, the worthy Baron thought that every kind of license was admissible, and advertised five franc consultations in all the newspapers. The bait, however, did not take; the advertisements ceased, and their author has adopted a more legitimate mode of announcing his existence to the public. This consists in the simple, and now thread-bare practice of addressing a memoir to the Institut—an innocent manœuvre, which has somewhat the effect of a Government stamp on our quack medicines; but, with this difference, that it costs nothing. The paper of M. Heurteloup contained the description of a new mode, in which the author proposes to prevent some of the inconveniences that attend extraction of the stone by the high operation. Amongst these the most formidable is, extravasation of urine through the wound of the bladder. To prevent the occurrence of this accident, M. Heurteloup proposes introducing into the wound a gum elastic tube, armed with a small bladder, which is distended by insufflation. On gently drawing the inflated bladder from within outwards, the incision of the bladder is closed, and the risk of urinary extravasation avoided.

NEW TREATMENT OF EXTERNAL INFLAMMATIONS.

This is a discovery of M. Latour, who sets out from the very questionable theory, that inflammation is the result of an increase of the animal heat. Having come to this conclusion, the author looks about him for another one, and finds to his hand that of M. Fourcault, who affirms "that the immediate action of the air is the absolute cause of the development of animal heat in the skin." To put the two conclusions together, and convert them into a practical formula, was now easy. If inflammation depend on heat, and heat on air, we have only to exclude the last link of the chain, and we get rid of the first. For many years the author affirms that he has applied this theory to the cure of external inflammations with the greatest success. According to M. Latour, exclusion of the air quickly arrests every kind of cutaneous inflammation, even furunculus and the specific inflammation of small-pox pustule. At first the author employed a solution of gum, with which he covered the inflamed parts; but lately he has had recourse to collodium, which answers better. Two cases of erysipelas, rapidly cured in this way, are the only proofs the author affords of the efficacy of his practice. As to the theory, the less said about it the better.

THE SPONGIO-PILINE.

This, perhaps, may be the place to mention, that the Belgian Academy of Medicine has given a favourable report on the spongio-piline of Mr. Markwick. The Academy, however, cannot agree with the inventor, that the new substance is capable of replacing the common poultice in all cases. Wherever an emollient effect is desired, the old method must be had recourse to. The Academy requests Mr. Markwick to forward a few yards of his stuff to the members for experiment. One would think it would be more simple, and more "encouraging" withal, to buy it. Is there not a "Spongio-piline Company?"

At the French Academy of Medicine, nothing worthy of note occurred this week. An unfortunate, named Berst, endeavoured to palm off a note relative to a "new mode of magnetising" on the Academy, but failed. The Secretary refused to receive the deposit, observing, that the Institut and the Academy had long since classed the science with "perpetual movement and squaring the circle," —subjects on which they declined receiving any further communications.

CALCULUS FILLING THE WHOLE BLADDER —LITHOTRITY—CURE.

A remarkable case of this kind was admitted into the Hôtel-Dieu, under M. Jobert, in the early part of the present month, and operated on last week, with complete success. It occurred in a female, who, for many years, had laboured under vesico-vaginal fistula, from injury inflicted during a laborious delivery. For this accident, she had been treated, without success, at St. Louis, by M. Malgaigne, and afterwards by M. Jobert; but she refused to permit the latter to operate on her. In the year 1839, the first symptoms of stone made their appearance, and continued to progress without interruption, yet the patient obstinately refused to enter an hospital, because, during her last sojourn at St. Louis, a patient in the next bed had died after being operated on. At length, after ten years of suffering she

entered the Hôtel-Dieu on the 2nd of March. On examination the cause of the disease was discovered at once. The whole of the bladder, nearly the whole of the urethra, and a great part of the vagina were blocked up by an enormous calculus. It was impossible to pass a sound more than a line or two beyond the meatus. In the present case it was fortunate, perhaps, that a fistulous opening had been established into the bladder, because no instrument, even of the minutest kind, could have been passed through the urethra. M. Jobert, therefore, resolved on making an attempt to crush the calculus through the vesico-vaginal fistula. One of Heurteloup's lithotritors was therefore introduced, and, after a considerable degree of trouble the calculus was grasped between the two branches of the instrument. Here, however, a new and unexpected difficulty presented itself. The stone was so hard that the perforator made no impression whatever on it. The operator now bethought himself, luckily, of percussion. The instrument was adapted to this mode of disintegrating calculi, and after a few sharp taps, the stone broke up into numerous fragments. These were readily extracted; and an operation, which at first promised to be long and extremely difficult, was over in a few minutes,—indeed, a remarkable triumph of modern surgery. The patient is doing as well as possible, and M. Jobert flatters himself that he will be able to cure the fistula also. He is, asy ou know, famous for these kinds of operations. Some time ago, a case of difficult labour occurred at the Clinical Hospital, under M. Paul Dubois, or rather a case in which the Professor thought it necessary to excite premature delivery, in order to avoid the accidents which must have inevitably arisen had the pregnancy been allowed to continue for the full period. It is not quite clear what happened under the hands of M. Dubois, but the woman came out of his hospital with a urinary fistula. On examining the vagina it was impossible to find any trace of fistulous opening. As the researches, however, were continued, a stream of urine gushed forth from the neck of the uterus. On injecting some fluid into the bladder, the whole passed out through the os uteri, and at length it was possible to introduce the finger through the neck of the uterus into the fistulous opening, and thence into the bladder.

This, it must be confessed, was a very ticklish case, yet the address and perseverance of M. Jobert overcame its difficulties. The neck of the uterus was freely divided by two incisions, which were continued until the utero-vesical opening was exposed to view. The edges of the fistulous orifice were now refreshed, and the vagina detached from its connexions with the neck of the uterus, in front and laterally. This done, the edges of the fistula were brought together with three points of the interrupted suture, and a perfect cure was obtained. The woman can now retain her urine perfectly, and M. Jobert is, justly enough proud of his cure. He exhibited the woman at the last meeting of the Academy of Medicine. This, by the way, is a very prevalent custom here; yet one not free from objection and the appearance of charlatanism; especially when, as in the present case, the effects of an operation do not admit of ocular demonstration.

MEDICAL STATISTICS OF FRANCE.

M. Roubaud, the author of the "Medical Annuary," a work similar to, but not so complete as the Medical Directory, gives some interesting statistical information relative to the medical corps in France. "There are 18,081 medical practitioners, and 5372 apothecaries in France. The practitioners are distinguished into 10,955 doctors of medicine, and 7126 officers of health.

The population of France, according to the last census, is 33,255,181. Hence we have one practitioner for 1839 inhabitants.

The proportion varies much in different parts of France. Thus Paris, with 1,053,897 inhabitants, has 1354 doctors and 64 officers of health; or one practitioner for 744 inhabitants. Again, the proportion of medical men to the population is much greater in the south of France than in the north. Thus Calvados, with a population of 359,473, has 267 practitioners, while the Cotes-du-Nord, for 598,872 inhabitants, has only 77 doctors and 80 officers of health.

Of the whole number of medical men two-thirds are doctors and one-third officers of health: and, with regard to their distribution, M. Roubaud establishes this very curious fact, that the poorer Departments are much better furnished with doctors than the richer ones. The author explains this by the circumstance, that the poorer departments are agricultural, and, as the middle classes find a difficulty in selecting any other profession for their children, they make doctors of them.

In the mountainous Departments, as the Upper Alps, Cantal, &c., the proportion of doctors greatly exceeds that of officers of health: thus, Cantal has 122 doctors to 15 of the inferior class; the Vosges, 91 doctors to 24 officers of health; and so on. It is impossible to explain this apparent anomaly.

With respect to the apothecaries, the author is much more meagre of his information. As they are not, however, divided into two classes, like the medical practitioners, less was to be learned from their distribution, &c.

The Prefect of Police here has just covered the walls with a list containing all the apothecaries licensed to sell drugs in Paris. It appears more voluminous than our Middlesex Game-list.

SCOTLAND.

[Edinburgh Correspondence.]

PLAN ADOPTED TO PREVENT THE SPREAD OF TYPHUS.

A Clinical Lecture, recently published by Professor Christison, turns on a subject of especial interest to our brethren in Edinburgh. It is on the spread of typhus within the walls of the Infirmary, and on the effect of a plan adopted some years since to counteract this evil. It appears that this plan was proposed, and was begun to be acted on in 1842, and has been continued ever since in the clinical wards, with only two interruptions for three months each. It consisted in admitting a few fever cases into the wards for general diseases, instead of confining all the fever cases to separate wards; the proportion of fever cases allowed being four, in wards containing between twenty and thirty patients, the space for each bed in the clinical wards being 1,100 cubit feet. The chief rules adopted at the same time were the following:—"That the fever patients shall, if possible, be washed in the bath before being carried into the wards; that their clothes shall be removed to a garret, and there fumigated and cleansed, and not restored till the patient's recovery; that the nurses shall prevent the other patients from having unnecessary intercourse with those labouring under fever; that convalescents from fever shall keep to one fire-place, and the rest of the patients to the other; that the number of fever cases shall never exceed four in a long ward, and that the mattresses and bed-clothes used for fever patients shall be stamped with the word 'Fever,' and never used for any but the four fixed fever beds." It appears, that before the plan was adopted, the opinions of several hospital physicians in London and over the country were asked, and found to be favourable. Among others, that of Dr. Bright, of Dr. Williams, of Dr. Boyd, and of Dr. Latham. According to Dr. Christison's view this plan has answered well. During the six years subsequent to 1842, in which he did duty, in all for three years and a half, he had to report only five cases of typhus as having commenced in the wards, and, in three of these, it was equally probably that the infection had been imbibed before admission, as that it was derived from the fever cases under treatment. And he ascribes the spread of typhus among the patients and students in the clinical wards at the end of the last year, from three cases admitted in the usual manner,—two into the male ward, and one into the female ward, to the accidental neglect of several of the precautions laid down in the regulations above referred to. From these three cases, however, five male and two female patients appear to have caught fever, besides three students.

There can be no doubt that Dr. Christison has sufficiently established the three principal propositions which he illustrates in this lecture, namely, that when cases of typhus are accumulated in numbers within distinct wards, the disease is sure to spread largely to those who come in contact with them—that there is much less danger of such a communication of the disease, when no more than four cases are admitted, under proper precautions, into a large ward along with other patients; and when a physician, clerk, or student is attacked with fever, and treated in his own house, or in his own lodgings, that it is rare for the disease to spread to the attendants or to the members of the household.

It is, however, at the same time apparent, that Dr. Christison's conclusion does not extend to determining what is the right plan as regards contagious fever in the general arrangements of an hospital, but only as respects the convenience and safety of clinical teaching. It is manifest, that the additional safety obtained for those employed in the wards, and frequenting them, is purchased at the cost of an additional risk of infection, however small that may be to those who come in to be treated for other diseases. But, in the general arrangements of an hospital, it cannot be necessary to say who are entitled to have their interests first cared for. Surely not those who, by the duties they have voluntarily undertaken, are bound to expose themselves, as much as may be necessary, to the risk of contagion; but those who, having come into the hospital to be relieved of diseases under which they already labour, are entitled to expect that they shall be kept secure from the attack of new maladies. But, however well the plan may be adapted for the clinical wards of the Royal Infirmary, it is totally inapplicable to the general arrangements of the whole House; for, though it might be practicable at present, when fever is at its minimum, to dispose of all the fever cases in the general wards as soon as an epidemic arises, this plan must give place to separate wards to receive the numerous cases which then pour in; that is to say, at the very time when the rise of epidemic influence (whatever that may be) renders the risk of infection infinitely greater, this plan as a general measure must be abandoned, simply because the fever-cases then far outnumber all the rest of the cases put together, surgical included. The plan, then, which Dr. Christison advocates fails at the very time when a measure is most required to diminish the risk to which the medical attendants and nurses are exposed.

It is idle, then, for the managers of the Infirmary to expect any advantage from Dr. Christison's plan in the case of an epidemic, and yet such emergencies deserve their serious attention. Dr. Christison truly says, "it has been found, during the thirty-two years of my observation of fever in Edinburgh, since I first became a resident clerk in this Infirmary, that in fever wards all the attendants catch the disease sooner or later, the nurses, clerks, dressers, and physicians, and when there has been a fever hospital, that also the matron, apothecary, domestic servants, shopmen, porters, and even the gate-keepers, do not escape. Many of these die, for in such circumstances fever is almost always violent. The mortality has been especially great among the clerks; and in the period alluded to four physicians have perished, two of whom, cut off in the very flower of their age, were men of so great promise that their untimely death is even yet deplored as a public calamity. These are fearful evils, lamentable in any circumstances; painfully so if they could have been avoided; and it is now clear that they were far from inevitable." But with a view to avoid such evils, the conclusion from Dr. Christison's facts must be somewhat different from what he has drawn. The presence of other patients in the wards along with fever cases is not necessary to prevent the fever from spreading—it would surely be an advantage if the other patients were absent. What is wanted is more space for each patient than is allowed in ordinary fever wards. The important fact, that fever seldom spreads from one case, in well-kept private houses, cannot be too much dwelt upon. Let the fever wards of an hospital, and the wards of a fever-house be brought into the same circumstances of ventilation, in proportion to the amount of contagious virus generated, and these must cease to be *foci* for the reproduction of the disease. It is far more easy to ventilate a large apartment, with several patients, than a small apartment with only one patient. And the

real reason why fever wards and fever-houses are the causes of so much danger to the nurses and medical attendants is, that they are over-crowded,—in short, that each patient is not allowed anything approaching to that space for free air which a single patient, in a well-kept private house, is afforded. It is undeniable that, in those severe and extensive epidemics to which Dr. Christison refers when he speaks of the wide-spread of the disease in fever-wards and fever houses, among those employed in the care and treatment of the inmates, the space allowed for each patient has hardly ever been so large as that considered necessary for each individual in wards appropriated to other diseases. In short, that a practice quite the reverse of what all experience teaches has usually been followed, merely because the cases flowed in faster than accommodation could be provided. During the last epidemic, when cases that had been commenced in Ireland sometimes came under treatment in our Infirmary, the influx was so great that it is much within bounds to say, that the fever patients crowded together in our wards were often from 40 to 50 per cent. beyond the number of ordinary cases these were appointed to contain. Before, then, fever wards and fever houses be condemned as nurseries of the disease, let an opposite plan be tried, and, instead of 14 or 15 cases of fever being crowded into one fixed to receive 10 ordinary cases, let the effect of putting no more than five fever cases into such a ward be studied. And let the public or the parochial authorities be earnestly called on, before the rise of another epidemic, to provide this necessary, or, if need be, even a more ample accommodation for such an experiment.

THE IMPURITIES OF CHLOROFORM AND THE MODES OF PURIFICATION.

Our Professor of Chemistry, Dr. Gregory, is about to publish a Paper on chloroform, containing the result of his investigations, with the aid of his assistant, Mr. Kemp, into the modes of preparing chloroform, its ordinary impurities, and the modes of getting rid of these. It appears that the varieties of chloroform in the market are very great, many of them very impure, and some containing no more than one-twentieth part of true chloroform. In the ordinary varieties, the impurities are chiefly peculiar oily compounds, some of which Dr. Gregory considers to be of a poisonous quality, and, without denying the possibility of fatal effects from pure chloroform, when improperly used, he is disposed to regard the deleterious substances present so abundantly in many of the commercial varieties of the drug, as the principal source of the casualties which have been hitherto reported. Chloroform, in a state of purity, is found to have a much higher specific gravity than was at first supposed, being considerably more than one half heavier than water; and some of the Edinburgh manufacturers have already brought the article designed for the market up to the proper density. Dr. Gregory regards the chloroform procured by means of wood spirit as identical with that procured by means of alcohol; but, as the former contains a larger proportion of impurities, it is less frequently found fit for medical use. The smell of pure chloroform is of a very pleasant, fruity character; the less pure form, after evaporation, leave a less volatile residue, having a fætid, or, at least, a disagreeable odour. Strong sulphuric acid exerts no action on perfectly pure chloroform. When the two fluids are mixed, the chloroform, being lighter, rises to the top, and may be drawn off unchanged by means of a pipette; and, if any of the ordinary deleterious oils are present, the acid acquires a dark colour; and, after some time in this case, the chloroform, freed from these, may be drawn off with no other contamination than the presence of a little sulphurous acid. The sulphurous acid may be removed, by agitation of the liquid with a little peroxide of manganese. Thus, strong sulphuric acid affords at once an easy test of the purity of chloroform, and a no less easy mode of purification when it has been prepared with any ordinary degree of care. After the addition of the strong sulphuric acid, a dark circle marks the line of junction till the whole of the oily substances present have been decomposed. Chloroform should not redden litmus paper; nor should it corrode the cork, as has been observed, from the presence of hydrochloric acid. The publication of Dr. Gregory's paper will be a most important boon to the public and to the Profession.

IRELAND.

[Dublin Correspondence.]

To the curious in such matters, some interesting speculations by Dr. Whately come to us this week, all the way from Geneva. In such troublous times of the Church's history, it is quite refreshing to find one of our ablest Irish writers so engaged. The question he wishes to decide is one of no little value to the physiologist and well-informed physician. It is, Whether the physical and physiological characters of the human race, as shown ethnologically, corroborate, or otherwise, our traditional history of man's origin; has man become what he is by his own instinctive strivings? In other words,—as the "Vestiges-of-Creation" school would have it,—Is he, in his present civilised state, the result of development, or must he *have been put on the route* of civilisation. From the analogy of savage tribes at present, which seem incapable of such development,—inertia and mere animal gratification their ruling characteristic; the culture of the soil and the chase their highest ambition,—Dr. Whately logically deduces, that man is not the result of development; that the science of Owen and the Germans, as to the homologies of the skeleton may be very true, but that otherwise the analogies with other animals cease, and man, as we are told, must have been made a "thinking soul." This beautiful agreement between Revelation and the facts every day about us, worked out by such a master-mind as Whately's, is in every way worthy the consideration of pupils, and worth a thousand homilies about Medicine leading to materialism and the like; as such, the work in its English dress is worthy of perusal. An interesting corollary is worked out, with which, of course, we have nothing to do, namely, that Paganism must have followed the true worship of the Deity; and, perhaps, reasoning back, that in those countries where the former now exists, a quite different state of the inhabitants of such districts must have previously existed, religion thus assisting ethnography. To turn from grave to other matters.

DIAGNOSIS OF HERNIA.

In our present exact acquaintance with this subject, it is scarcely within the range of possibility perhaps, to mistake hernia for hydrocele, and but that the thing sometimes does and will occur would it be worth alluding to. An instructive case brought before the Surgical Society some days since by Dr. McDonnell, illustrates one or two points very fully. We are each of us aware, of course, of the "wise saws" of the books and lecture-room, about the modes of distinguishment of the two diseases. Hydrocele, among other things, extending upwards to the abdominal ring, absence of impulse on coughing, slow growth, transparency, &c., on which we have our settled opinions as much as about the diagnosis of any other surgical affection. To these, exceptions sometimes occur, and modern instances are not wanted where our best directed diagnosis is at fault, forcing us to study each particular case, with all the lights we are in possession of.

Congenital hydrocele and hernia, we need scarcely say, are one and the same as to outward appearances, and even Sir Astley Cooper all but confounds them as far as name goes. Yet how different. A diffused collection of fluid is also found, in more advanced life, in the cellular structure of the chord, not very distinguishable at first view from omental hernia, the former perhaps broader below than above, diminishing on pressure, fluctuating, &c., but requiring much experience of these affections to make out quite clearly. Then ordinary hydrocele and hernia, so well marked in general, have also not unfrequently been confounded. The case brought under discussion by McDonnell bears on this point. It was that of a lad, fifteen years old, brought to the Richmond Hospital lately, with a tumour quite translucent like hydrocele. He got a kick three years ago when it first came down, and according to his own account it went away again. Some symptoms of an unpleasant character, vomiting, soreness, &c., set in, and McDonnell was about to operate, but it went up again. From the history of the case it did not look like congenital hernia. The question arose whether hernia and hydrocele co-existed. Sir Philip Crampton had seen such things; and in the course of the discussion a more interesting case was mentioned by Stapleton. A boy was brought to Jervis-street Hospital with a tumour in the groin, apparently hernia. On examination, however, it was found transparent, and the conclusion arrived at that it was hydrocele. Three punctures were made the usual fluid issuing out. By the third day it had all disappeared; but, to his astonishment, on the patient sitting up, the tumour got as large as before; of somewhat different shape, but returning into the abdomen with a gurgling sound. The hydrocele, in fact, would seem to have kept up a hernia. The first tumour, he thought might have been hernia; but its transparency, the point under discussion in M'Donnell's case, led him to alter his opinion, and puncture. Blizard, if I recollect rightly, was the first who noticed this rather puzzling complication, and actually opened the *tunica vaginalis*. Cline, too, speaks of it as a matter of deep practical importance. The experience of our Irish Surgeons, second to no other school in all that relates to this very class of diseases, must be received with great weight. M'Donnell, indeed, from his experience at the Truss Institution attached to the Richmond, is inclined to think, that hydrocele *keeps up* hernia oftener than we are aware; that large hydroceles give a distinct impulse on coughing. Many persons come for trusses labouring under this very disease, said to be hernia, from this sign alone anything but infallible.

SYPHILIS.

The question, "whether primary syphilis may exist in the female without her knowledge?" has been discussed lately at a Society of Students; and some cases of no little interest, the counter parts of the celebrated Lusitanian opera-dancer, cited. The question is, perhaps, not without its two sides. Women do *not wish* to know such an unpleasing fact; and they seldom or never consult the surgeon till the infection has made considerable way. In one of the cases cited, there was evidence of a gleety discharge, quite sufficient, we take it, to settle the discussion. We have seen, perhaps, the converse occasionally. A woman, fancying she is well, will give infection to all her new lovers, while one steadily attached party, by what Ricord calls an "acclimatation" of the contagious matter, will escape, under the impression, possibly, that all is quite right. The matter of gonorrhœa no doubt failed, in Ricord's hands, to give true chancre; and a large ulceration on the genitals will often be attended with little danger; but every day's experience will convince the Practitioner where exceptions to these rules will occur; and the slightest hæmorrhage, and an ulceration the size of a pin's head, will do a world of mischief.

Some recent fancies about the spleen must keep till next week.

ANIMALCULAR RESEARCHES.

In the natural history way, as well as in any one more immediately practical, our Irish school has been also not a little busy of late; the fearful array of big names of little animals, lately paraded in the *Lancet* as existing in the Thames, has been long known to the initiated on the Irish side of the Channel; a complete republic of *diatomaceæ*, and other microscopic animals, enough to frighten all the old ladies in Belfast, having been found, by the Rev. W. Smith, in Lough Mourne, among the quiet hills of Carrickfergus. The Government, at present engaged in analyses of water for the English metropolis, should not be frightened at such things. In the Jordan, considered the type of everything excellent in rivers, *polygastricæ* and *entomostracæ* abound; in the Dead Sea, *polythalamia*; in many other lakes and rivers similar creatures, if we remember correctly, with like sesquipedelian names. As an instance of the way in which such things "most do congregate," a drop on the point of a knife, taken at a particular part of Lough Mourne, and properly arranged, showed fifty-five different species of animals, and many of these species hundreds of individuals. In the Liffey, and, indeed, all our rivers, it is only rational to conclude, the same obtains, so that the Thames is not singular.

Apropos of natural history; from the labours of

Mackay, Harvey, Allman, &c., perhaps it may be interesting to state, that Professor E. Forbes, in his late classification of British plants, places our Irish Flora as his first group, leaving out the south-east of Ireland. The Flora of the remainder of the country being at once more rare than that of the rest of his classification, and derived farther off,—the *nearest point the North of Spain*. He instances some *odostomiæ* as lately found in the Arran Isles off Galway.

SELECTIONS FROM FOREIGN JOURNALS.

THE ANIMAL HEAT OF CHILDREN.

The following are the principal results obtained by M. Roger, after more than 1000 experiments with the thermometer. At the moment of birth the temperature of the infant is 104 Fah., or that of the medium which surrounds it; but the temperature soon falls to 95 on an average, and for the next few years varies from 97 to 100. Typhoid fever is the disease in which the animal heat of the child is greatest. This occurs even when the circulation is not much accelerated. In pneumonia the temperature is only 102½, and it varies considerably in eruptive fevers, according to the periods of the eruption. In meningitis it is very great. Variations occur rather according to the individual than to the severity of the disease. In fact, no correllation can be discovered between the degrees of animal heat and the age of the child, the intensity of the inflammation, its periods or special nature. Nay, more, the temperature is generally less elevated towards the middle period of the disease than at its commencement or end, whilst the contrary holds good for every other species of inflammation.

In apyretic diseases or rickets, dropsies, &c., the loss of strength is not accompanied in children by loss of heat. On the other hand, it is not increased in choreal convulsions, although the augmentation of muscular action might incline us to anticipate an opposite result.

Hardening of the cellular tissue is the disease in which the most remarkable loss of animal heat exists. In 19 cases the thermometer showed a heat under the axilla of 91¼; in 7 cases, of 79; in 2 cases, of 73 or 74; that is, a diminution of 31 degrees Fahrenheit below the normal heat. The loss of animal heat is progressive, and always proportionate to the degree of the malady; in some cases even preceding the other symptoms. This diminution of animal heat had been pointed out long ago, but by no one so carefully noted as by M. Roger.—*Anniversary Meeting of Institut.*

SENSATION NOT EXCLUSIVELY CONFINED TO THE POSTERIOR ROOTS OF THE SPINAL NERVES.

Four years ago, M. Brown-Sequard announced in his thesis, that division of one column of the spinal marrow does not destroy sensibility in the parts supplied by the portion of the chord which remains separated from the brain. On the contrary, these parts acquire greater sensibility, while the limb of the opposite side is more or less completely deprived of feeling. Hence it may be concluded that the action of the spinal marrow, as regards the transmission of sensibility, is crossed, like that of the optic nerves. This was distinctly proved by many experiments of M. Sequard. The same author likewise asserts, that, although the posterior chords of the spinal nerves are partially connected with the transmission of sensibility, other parts of the nervous system enjoy the same property. Thus, not only is section of the posterior chords of the spinal marrow unattended with loss of sensibility; but, on the contrary, is greatly increased in parts that ought to become insensible according to the theory of physiologists. —*Gaz. Med. de Paris*, No. 9.

CAUSE OF THE ATROPHY OF PARALYSED MUSCLES.

The experiments of Reid on this interesting subject led him to conclude, that the atrophy of muscles which have been paralysed by the section of the nerves supplying them, depends simply on the fact, that the muscles have remained a long time in a state of repose. The conclusion was drawn from experiments on frogs; but the experiments of M. Sequard on mammalia, performed with the object of throwing further light on this important point, have led to many results of an extended and more practical nature.

One of the sciatic nerves of a rabbit was divided, and a portion cut out. Two months afterwards, the limb was greatly atrophied, and its contractile power diminished. It was now galvanized every day for six weeks. The paralysed muscle had acquired its natural bulk. The paralysed muscles were equally sensible to the stimulus of galvanism, and the two posterior extremities were of the same weight. From these and many other experiments M. Sequard concludes—

1. That paralysed muscles may preserve their contractile power and normal volume, if they are galvanised daily.

2. That atrophied muscles, which have lost a considerable part of their contractile power may recover their normal bulk and contractility under the influence of galvanism.

3. That galvanism replaces the nervous influence completely both in keeping up and restoring the nutrition of muscular tissue.

4. That in many cases of paralyses it would be well to keep the muscles in a normal state by galvanism, not indeed with the view of combating the cause of the paralysis, but of enabling the muscles to obey the nervous influence the moment it is re-established.—*Ibid.*

NEW SIGN OF ULCERATION OF THE CORNEA.

M. Langier has suggested a new mode of detecting extremely small superficial ulcerations of the cornea. It is well known that of the three images seen in the eye when a lighted candle is placed before it, the anterior is produced by the cornea. As long as the cornea is unchanged, this image is defined and regular. The least alteration in convexity produces, however, changes; a small round ulcer, even if the transparency be unimpaired, makes the image spheroidal or circular; an irregular ulceration makes the form correspondingly irregular and diffused. This method appears most applicable to chronic ulcerations, where there is impairment of vision; and yet, on account of the extreme minuteness of the ulcer, it may pass undetected. (*L'Un. Med.*, March 2.)

ANÆSTHETICS IN MIDWIFERY.

Dr. Channing reports from his own practice, and from that of nearly fifty physicians in or near Boston, the results of the use of anæsthetics in 515 cases of natural labour, and in 52 cases of instrumental or complicated labour. Of the former the mothers all did well, and there were but 7 still births. In the latter the results were most unexpectedly favourable. Of the instrumental and complicated cases, in 20 the forceps were applied, all the mothers and 15 children being saved. In 4 craniotomy was performed; mothers all saved. In 10 convulsions occurred; 6 mothers and 3 children saved. In 9 the arm presented; mothers and children all saved. In 3 the breech presented; mothers and children all saved. One case of accidental, and 2 of unavoidable hæmorrhage; all the mothers and 2 children saved. One case of twins; mother and children did well, completes the list. Comparing these with Dr. Collins's cases, we find a material difference in favour of the former. Dr. Collins reports 173 cases of the four varieties of irregular labours specified above, of which he saved 145 mothers and 50 children. Dr. Channing 43 cases, saving 39 mothers and 24 children, showing a difference in his favour of 6 per cent. of mothers, and 27 per cent. of children. Dr. Channing also reports the opinions of thirty-four physicians, thirty-one of whom speak unequivocally in favour of anæsthetics in midwifery, and the remaining add the qualification of the drug being pure.

Dr. G. N. Burwell, of Buffalo, gives thirty-seven cases in which he gave chloroform to parturient females always with safety and advantage.

Dr. Lindsly had employed anæsthetics "in about 40 cases with complete or partial relief of suffering, and without injurious effects to mother or child. Dr. Joseph Parish, of Burlington, new Jersey, and Dr. J. Clark, of Marion, Pennsylvania, also report favourably. As to its influence on the child, the researches of Siebold and Dr. Putnam, prove that the sounds of the fœtal head are not affected by it; while the experience of Simpson and of Channing show the number of still-born children with chloroform, to be under the average.

We have yet hardly cases enough to establish the fact, that the contraction of the uterus after delivery has been more perfect, and the chance of hæmorrhage diminished under etherization. Although the reports of Dr. P. Smith and others show that patients who, in previous labour, had flooded freely, altogether escaped in those in which chloroform was administered.

In puerperal convulsions it has been very successful, as proved by Messrs. Clifford, Wilson, Kite, Hearn, and Clifton, in England; by Chailly in France, and by Dr. Channing (10 cases) in America. In nearly all these the spasms were entirely controlled, or essentially modified, by the chloroform. —*Trans. American Med. Association*, 1849.

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THE MEDICAL TIMES.

SATURDAY, MARCH 23, 1850.

THE Society of Apothecaries have just issued their Regulations for 1850; and we observe that they have introduced an important change, which bears strong evidence of the care they are now bestowing on the medical training of the student. They have made an order, that at the option of the student, a Course of seventy-five Lectures on Clinical Medicine shall be received, instead of the second Course of the Lectures on the Practice of Medicine. This Course of seventy-five Lectures is to be given by a special Professor of Clinical Medicine; and it is recommended, that such Professorship, if not existent, should be founded at all the Schools. This is certainly a move in the right direction, and will, we trust, enforce more regular tuition of the students in the Medical wards of the Hospital than has heretofore been the case.

We should like to see this principle carried out still further, and some means be devised to have the student not only a silent auditor at clinical lectures, but an active investigator at the bedside, under the immediate superintendence of the Professor of Clinical Medicine. This method is, in fact, already partly in operation in our large London Schools, and in Edinburgh; but, as the attendance of the students is optional, and, as the same individuals do not attend the Professor day after day, there is a want of that methodical and progressive instruction at the bedside, which regular attendance would permit. The Professor, as the attendance on hospital practice is now carried on, may have one day an audience with whom he can debate the utmost refinements of diagnosis; and, on the following occasion, he may find his hearers ignorant of the simplest principles of auscultation, or the common manipulations of physical diagnosis generally.

The education of the student can never be complete, unless he is taught to exercise every

sense in the determination of the symptoms of a disease, and every faculty of his mind, in assigning to such symptoms their appropriate value. The Apothecaries' Company have evidently in view some plan by which this desirable end is to be accomplished, and, we need hardly say, we shall assist them to the utmost of our power in the carrying out their intentions. The Apothecaries' Company, in spite of the reproaches which have been made against them, have, since 1815, done more to improve the education of the the student, and thereby to raise the general scientific and social standing of the Profession, than either the two other Colleges of Surgeons and Physicians, during the long periods of their now trembling monopolies.

EXTRAMURAL INTERMENT.

A PHILOSOPHER who has finished with that appendage to his mind, which we call the body, may be mightily indifferent as to what becomes of his cast-off garment. He may regard his now inert muscles and bones as so many protein compounds, which may pass into their constituent elements as rapidly as they please. This process does not concern him; and whether his ultimate atoms travel to the pole or the equator is a matter of no moment.

Most men, however,—and of all men, Englishmen,—are of a different opinion. "To rest in quiet grave," is a wish which each generation has uttered since the time of Spenser. No man likes to think that his outward man, which has attended him through so many vicissitudes, is to be treated, after the last sigh, like a mass of base clay, whose noble uses have been quite forgot. We can well conceive, that the immortal tenant, just set free, would entreat, had it the power, that its discarded material abode should be cared for with tenderness and respect; as the sacred earth, round which the fragrance of the fabled Lotos lingers still.

Whatever may have been the wishes of Englishmen in this Metropolis of ours, it is, however, certain that in the majority of cases they have been but vain desires. All our readers know the disclosures which Mr. Walker has made respecting the state of our graveyards. Burial-places full to overflowing; fresh corpses constantly poured in, with indecent and illegal haste; the old bodies dug up to make room for the new comers, and partly exposed, it may be, to the eyes of those who, but a few short months before, had placed them in their graves; the dead acting thus as centres of disease for the living, and punishing with fearful interest the neglect and carelessness of those who permitted this profanation; the population growing callous to the awfulness of death, since thus daily and hourly the emblems of mortality are made of no account.

The Board of Health have just issued a Report, in which a masterly exposition is made of the evils to which we have referred. If they had done no more, the Board in acting thus would have done well. But they have also suggested a plan, a feasible and practical plan, which bids fair to render Mr. Walker's book in a few years not an actual and present history, but a piece of curious antiquity.

It has been evident, for some time, that our crowded churchyards, incapable of holding more bodies, and already acting most injuriously on the districts around them, must be closed. The point was, what could be substituted for them. There appeared to be only two practicable plans, viz., incremation, or a vast public cemetery outside the City altogether.

The first suggestion was, on many accounts, objectionable; the last was not easy of execution, since such a public cemetery, to carry out the object, must be removed from the city, and yet be accessible to the poorest inhabitant. The Board of Health, however, have, with great sagacity, chosen a site which combines, if the solecism may be pardoned, both distance and proximity. Some abbey land at Erith, on the banks of the Thames, is proposed to be bought, and converted into a National Cemetery. The bodies will be conveyed, most appropriately, by the "silent highway," the river, which bisects London so conveniently, that the mass of the population is within a short distance of its banks. For the suburbs at a great distance smaller cemeteries will be made, or those now existing enlarged. The old churchyards will be planted with appropriate trees, and before the end of the century the spaces now filled with fatal effluvia will be clothed with beauty, and become redolent of life-inspiring air.

Such is the plan which, there is every reason to believe, will be carried out with benefit to all parties. What we chiefly admire about it is, its extreme common-sense. It convinces us also that the Board of Health is yet destined to do the State good service. Let them remodel their constitution, and admit to their councils more of that Profession who can best assist them, and the Board of Health may rest assured that the Medical Press will forget the error which was originally made when, in the formation of the Board, the Medical Profession was too contemptuously discarded.

DECORATIONS TO MILITARY SURGEONS.

IT is understood, that the Government has at last determined to extend to the distinguished officers of the Medical departments of the Army and Navy the Civil Order of the Bath. The military order will still retain its exclusive character. Although this is but a tardy recognition of the important services rendered to the country by our military brethren, yet we cordially accept it as a testimony of the increasing respect with which the Medical Profession is regarded by the ruling Powers of the State. True usefulness must, in the end, win gratitude. Military Surgery, anterior to the last war, was scarcely of that high, scientific character as to command the admiration of Generals and Statesmen; and there can be no doubt that, on many occasions, the shrewd common-sense of laymen detected the blunders and the inefficacy of the art as then practised. From, also, the days of Marlborough to those of Wellington, we had engaged in no campaigns of sufficient magnitude and difficulty to enable Military Surgeons to display the resources of their science, and to demonstrate the fact, that the art of saving life by an observance of sanitary discipline in camps and hospitals, and by Surgical ministrations, was of as much importance to the thorough efficiency of armies, and the winning of battles, as the more brilliant, though less humane art of slaying enemies by regiments with the bullet and the sword. The experience of the last Continental war, and of our more recent Indian conflicts, has at length forced upon our rulers the conviction of the high merits of Military Surgeons. The bestowal of the Order of the Bath is an act of homage due to their usefulness. We forbear to dilate upon the perils encountered by military officers, either in open field or in the trenches, because such risks are incident to all who engage in war, and we would rather that the honours conferred on Military Surgeons, were considered as bestowed on them rather for high Professional services than for any hazards they may incur in common with the meanest trooper in the ranks. We wish to see our Profession exalted for the sake of its own intrinsic merits, and the blessings it sheds upon humanity. It is in this spirit that we welcome, with warm satisfaction, the gracious intentions of Her Majesty towards Military Surgeons.

There is another class of our professional brethren who appear to us to have equal claims upon the justice of the country as the surgeons of the Army and Navy;—we allude to those Medical men who devoted themselves to the perilous and philanthropic duty of alleviating the sufferings, and mitigating the horrors incident to the visitation of the late devastating epidemic. There are yet to be found in our Legislature a few niggardly economists, cramped in spirit and of perverse understanding, like the honourable member for Coventry, who would withhold from the Cholera Doctor every reward, pecuniary or honorary, in testimony of the special services rendered by him to the public during that fearful period of danger and death. Such men, to the honour of England, are few. The sentiments of our countrymen revolt against such unchristian parsimony. We are not so generous as we might be, but we have not yet descended to this degraded level. We have some sense of equity, — some inspirations of justice, which save us from dishonouring ourselves to the extent of denying the impulses and the injunctions of humanity. As the world grows older, men who do deny such impulses will become fewer.

We believe that the public at large is becoming daily more sensible of the Profession's usefulness; and, if we are but true to our common interests, we shall rise to a still higher appreciation, and shall acquire greater public influence. On such an occasion as the visitation of an epidemic, it is especially desirable that the Profession shall set forth, in a distinct and forcible manner, the advantages the public have derived from the exercise of their skill. Let it be shown how the value of life has increased, and how much suffering has been prevented by the improved ministrations of Medical science. Compare past ages with the present, old plagues with recent epidemics, the mortality from specific diseases in former times to that which now prevails, and let the importance of our art to the best interests, the prosperity, comfort, and well-being of society, be made distinctly mani-

fest. No other profession or class of men has done so much towards the improvement and elevation of the nation's social condition as our own; and if this truth be brought home to the heart and conscience of every man, we shall have no fears about the estimation with which the labours of our brethren will be regarded.

Those surgeons who endured the anxiety and the labour attendant upon the Cholera service would do wisely to make to the Government a representation of their peculiar claims upon the gratitude of the country, and ask for a participation in those honourable distinctions thus tardily conferred upon their more fortunate Professional brethren.

ANÆSTHETICS IN EDINBURGH AND LONDON.

Four years ago the world was astonished with the announcement, that the inhalation of the vapour of ether rendered a person insensible to pain. America claimed the honour of this discovery, which seemed to promise to all an exemption from suffering, even during the most formidable operations. Men of science had scarcely recovered from the surprise which the "ether discovery" naturally produced, when they were startled by the announcement, that an eminent physician of Edinburgh had found in chloroform a still more safe and efficient anæsthetic agent. This required for its successful application a complicated apparatus, that a simple pocket-handkerchief; the one often produced a high degree of irritation in the pulmonary organs, the other but little excitement. Ether was frequently slow in its operation, chloroform quickly produced the anæsthetic condition. The triumph of the new agent was asserted to be complete, and the Medical world speedily addressed itself to the task of testing its merits. Dentists extracted teeth as if by magic, Surgeons amputated limbs as though they wielded Mercury's wand instead of the amputating knife, and obstetricians delivered their parturient patients with so much ease as to cause them frequently to doubt the truth of their accouchement. These successful results from so powerful an agent have not, according to the statements of the Medical men in Scotland, been marred by a single fatal case. This has not been the experience, however, of the Profession in England or on the Continent.

There is no doubt whatever, that serious consequences, in some instances, have followed the administration of chloroform; and, while we admit that the shock of an operation has often produced death, and that an anæsthetic agent may avert this, yet we cannot close our eyes to the fact, that patients have expired from the inhalation of chloroform, the *post-mortem* appearances having been such as to justify this conclusion. Upon this point our Edinburgh brethren join issue with the Surgeons of England.

An article has recently appeared in Messrs. Chambers' popular journal, and been copied into the *Times* newspaper on Monday last, in which the writer says, that from 80,000 to 100,000 cases have been treated in Scotland with chloroform, without a single death occurring; and the Author exultingly asks, would "80,000 or 100,000 full doses of opium, or antimony, or Epsom salts, or any other potent medicine, have been followed with equal impunity?" In common with the Surgeons of the Modern Athens, we rejoice at this unequivocal success of an anæsthetic agent, endeared to them, not simply from the good it has conferred upon suffering humanity, but also from its being the discovery of one of their own citizens; yet we cannot allow a Writer, in a Journal so extensively circulated as that of Messrs. Chambers, thus gratuitously to reflect upon the English Medical Profession, because chloroform has not experienced the same degree of success on this side the Tweed as in Scotland. Our provincial Surgeons he has gently castigated, but the London Medical men he has scourged most unmercifully; and, while he applies the whip, he tells them, it is because they are blockheads, lagging in the rear of science, as their forefathers did, who, for half a century after Jenner's discovery, allowed inoculation to be practised, in conjunction with vaccination, at a Public Hospital.

The Modern Athens we respect, on account of its University, and the long list of worthies who have shed a lustre upon that venerable institution, and upon Science, in her various departments. But it is certain, that many of those eminent *savans* have been tempted to leave the bleak mountains of Scotland for the more congenial South, and are now enjoying the reward due to talent and perseverance. Who was ever known, after he had passed the Tweed, to turn his face North, with the exception of Mr. Syme? And yet, with so fair a sprinkling of Scotchmen, the London Medical Practitioners are denounced, by an Edinburgh scribe, as now behind the age,—chloroform itself being witness!

It becomes a matter for the serious consideration of the English Medical Profession, when it has placed before it from 80,000 to 100,000 facts of the efficacy of chloroform as an anæsthetic agent, without a single fatal result; and the question naturally arises—How is it that the same amount of success has not attended its administration here and on the Continent? Does the fault rest with the operators, with the chemists, or with the peculiar constitutions of the patients to whom it is given? Not certainly with the operators, for they have been as skilful and as careful as it is possible for men to be; and yet, in some cases, they have failed. Not with the chemists, for chloroform from some of the first laboratories has been used when untoward results have occurred. Supposing, then, the statement to be true—though we confess we doubt it—the fault must be presumed to be in the *British Constitution*. John Bull is proverbially fond of the good things of this life, and hence it may be that his blood becomes highly charged with carbon; the administration of chloroform, under such circumstances, is fraught with danger. The hardy sons of the North, on the other hand, delight in porridge and milk; hence Scotchmen abound with bone and muscle, and are rarely surcharged with carbon, in the shape of fat,—an anæsthetic agent may,, therefore, be administered without injury. Our theory may not be quite correct, but, till a better one is proposed, we claim that it be admitted.

It is our earnest hope, that the same amount of success will continue to attend our Scotch brethren in the administration of chloroform; and we can assure them, that the few fatal cases which have occurred in the hands of English practitioners will not lead them to discard so valuable an agent in mitigating human suffering, but only to employ the utmost prudence and discrimination in its use. An extensive acquaintance with the Physicians and Surgeons of this Metropolis enables us to say, that, far from being prejudiced against chloroform, their great desire is that it may prove as safe and as useful as its most sanguine friends can desire.

THE "LANCET" AND UNIVERSITY COLLEGE.

We observe that the *Lancet* has returned to its system of attack against University College. We are pretty well informed of the reasons which induce this mendacious Journal to move heaven and earth to injure this Institution. If University College could have been "*influenced*," very different would have been the commentary of the *Lancet*. But "young Liston's" (!) merits have not been appreciated, and the *Lancet* has lost its interest in the place which has no vacancy. It has, therefore, assembled around it a crowd of disaffected, quondam students, whose merits have, according to their own notion, been equally underrated or overlooked; and these "honourable men" rejoice in exhibiting their capacity for false colouring and unfair interpretation. In our pages for last week, appeared the *correct* Report of the late proceedings at University College; the *Lancet* gave a *different* account.

We make these observations simply on the ground of public justice, and not with a wish to defend University College. Every one knows there are cases where the character of the accused finds a sufficient defence in that of the accuser.

PUBLIC MEETING OF THE PROFESSION.

We direct the attention of our readers to an advertisement issued by the National Institute, convening, on the 11th of April, a Public Meeting of the Profession, for the purpose of memorialising the Government upon the necessity of adopting a course of policy in accordance with the interests of the General Practitioners. The invitation is wide as the Profession itself; for, under the head General Practitioners are included Surgeons and Apothecaries, the gentlemen in practice anterior to 1815, and the Graduates of all the Universities in the Kingdom. We hope that the invitation will meet with a liberal response, and that delegates from every town in the provinces will be present at the meeting. It is probable that this movement, on the part of the Institute, will cause the Council of the College of Surgeons to move with caution, and deter them from recommending to the Government a scheme which they might, by old experience, anticipate would not be acceptable to the Profession at large. All reformers are now agreed, that no change of our Institutions can be satisfactory or perma-

nent that does not place the government of the Profession in the hands of the members. The representative principle will secure a just distribution of Collegiate honours and appointments, and provide the means of watchfully protecting the interests of that large majority of the Profession engaged in general practice. The true interests of the consulting classes of the Profession are also implicated in the success of the efforts now making by the General Practitioners; and we hope that we shall witness, at the coming meeting, as heretofore, the presence of many enlightened and liberal members of the Royal College of Physicians.

To the General Practitioners in particular we would say, that unless you make a decided and numerous demonstration on the 11th of April, the power of adjudication will slip from your hands, and injustice will triumph.

THE OPERATIVE SURGERY OF JOHANN FRIEDRICH DIEFFENBACH.

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(Continued from Vol. XX., page 510.)

CHAPTER XI.

OF THE OPERATION FOR FALSE ANEURISM, GENERALLY.

The operation for false aneurism, whether circumscribed or diffused, is indicated, when all rational attempts at a cure by methodical compression have failed, and the tumour is progressively enlarging. Provided there is no sign of inflammation, the skin retains the natural hue; the walls of the sac are not felt thickened and filled with coagulation; the whirring is very audible, and the swelling diminishes on pressure; there is no great urgency for the operation, and the time for its performance may be determined by accessory circumstances. But, when the contrary of all these is the case, when the tumour is become fixed and compact, the skin presents a reddish blue, or it may be a livid tinge, showing that rupture is impending, the operation ought not to be delayed, whatever the situation of the tumour, provided only it is within reach of the surgeon's hand.

Subjoined is the operative procedure:—1. Steady pressure is made upon the arterial trunk above the tumour, so that when the latter is opened, the surgeon may not be interrupted by the affluent blood, or the patient weakened thereby. This may be effected, if the situation permit, with a tourniquet, or otherwise with the fingers of an assistant. 2. Division of the aneurism by a longitudinal incision, and evacuation of the liquid and solid contents of the sac; namely, the blood and fibrinous clots. 3. Insulation of the vessel at the site of the incision, and application of a ligature both above and below the arterial wound.

The cavity is next stuffed with soft lint; the ligatures are drawn out at one or other of the angles of the wound; the lips of the latter somewhat approximated by adhesive strips, surmounted by a compress of lint, in order to imbibe the subsequent discharge of matter, and the whole surrounded by a few turns of a roller.

1. *Of the Operation for false Aneurism at the bend of the left elbow.*

This operation is most conveniently performed while the patient is sitting on a chair; the upper arm placed horizontally, with the elbow slightly bent; the whole limb directed rather backwards than forwards, and the forearm in a state of supination. The arm is supported in this position by an assistant standing on the inside, while the surgeon stands to the outside. If the patient is very feeble, the operation may be done in bed, or upon an operating-table.

The screw tourniquet having been affixed, either in the proximity of the axilla, or, if the person be very lean, further down the arm, with sufficient firmness to check the pulsation in the artery, and abate the tension of the sac, the operator makes an incision through the skin, which commences above, and terminates below, including the most prominent portion of the tumour. The most suitable instrument for the purpose is a moderately straight scalpel. The assistant strains the skin on the opposite side in order to increase the gaping of the wound. At this period the surgeon makes a puncture or small incision at the most attenuate and bulging part of the base of the aperture, upon which a gush of thick blood issues, mingled with old coagula. The sac is then to be thoroughly divided, both upwards and downwards, upon the forefinger of the left hand, cautiously introduced. The cavity is afterwards to be cleansed by injecting cold water and sponging, all clots and membranous shreds carefully removed, the condition of the artery accurately examined, and the situation of the orifice in the artery explored. If the latter cannot be detected, the tourniquet should be slackened, upon which a jet of florid arterial blood will come forth. Immediately afterwards the tourniquet may be again tightened.

The artery is now to be tied. As its walls are preternaturally thick and brittle, no more ought to be insulated than is absolutely required for the application of the thread. It may be laid bare, accordingly, to the extent of from three to four lines, by pinching up the cellular texture with forceps, then cutting into it and detaching it all round with the narrow ivory handle of a scalpel. Great foresight must be had to avoid injuring the nerves accompanying the artery or the vein. This accident might readily happen were inflammation present, because all these parts then become matted together, and evince more brittleness than in a state of health. If the vascular walls are much swollen, and, at the same time, in coalition with the above parts, there is imminent risk in insulating the artery. Under such circumstances the wound should be dilated upwards, and the artery tied at a point above, when it can be freely detached.

The ligation is accomplished by conveying a waxed silken thread round the vessel by means of an aneurismal needle. Before tying the knot, it should be distinctly ascertained that the median nerve is not included in the noose. The knot being made, one end of the thread is cut off a few lines apart from it. If no blood is emitted from the arterial wound on raising the tourniquet, this single ligature will suffice; but should the hæmorrhage persist, as is more generally the case, a second ligature must be applied inferiorly in the way above mentioned. The lower thread is to be brought out at the lower angle of the wound, and the upper thread at the upper angle; but should both ligatures lie side by side, they may then be placed together at the nearest angle of the wound, and the ends fastened to the skin with strips of plaster. The occasional easing of the tourniquet will show whether the hæmorrhage is altogether suppressed. Any collateral arterial branches which may happen to bleed are to be taken up and tied separately. Where the artery is unusually thick and brittle, instead of employing a thin waxed thread, which might cut it across, a ligature composed of several unwaxed threads is to be substituted, and not too tightly drawn.

Many surgeons employ Deschamp's needle for conveying the thread; but, in most cases of external aneurism, the ordinary needle will be found to answer the purpose. It is not advisable to cut off both ends of the thread from the knot, because it cannot then be ascertained whether the ligatures have divided the vessel and the obliteration is consummated.

The dressing has been already described; loose filling of the sac with picked lint, moderate approximation of the edges with adhesive strips, a compress and roller. The arm is inclined at an obtuse angle, a handkerchief brought round the wrist, and nape of the neck, and the limb placed in the most comfortable position for the patient. In the instance of aneurisms of a small size, an attempt may be made to procure immediate union by bringing the lips of the wound into contact with adhesive strips. This will often be crowned with success. Not so, however, when the aneurism is large and diffuse. If the sac be not filled with lint, the matter secreted and the extravasated blood form a lodgment, its surface becomes foul, the cellular texture ash grey and sloughy. With regard to the after treatment it may be remarked, that when suppuration is established the lint ought to be renewed, and an antiphlogistic, expectant, or stimulant plan adopted according to circumstances. As the wound contracts, the arm may be gradually brought from the bent to the straight position, with occasional alternations; as the process of healing advances the latter position is preferable, because the large cicatrices, implicating the skin and muscles, are apt to engender a permanent amount of flexion. Secondary hæmorrhage, proceeding from division of vessels by the thread, demands a renewal of the ligation both above and below.

The results of operations for false aneurism, the sequel of venesection, are by no means favourable, but, indeed, very often the reverse. Out of a number of cases in which I operated, I lost at least one fourth of the patients, despite of the utmost care taken in the operation and in the after treatment. The most part died with large diffuse aneurisms, extending considerably over the fore-arm, owing to gangrene of the cellular texture, degeneration of the muscles, and repeated parenchymatous, secondary hæmorrhage; others through exhausting suppuration; a few from phlebitis and malignant intermittent fevers. In short, the operations for false aneurism at the bend of the elbow are, on the whole, not more favourable than those for true aneurism, such, for example, as that of the popliteal artery; nay, perhaps, even less so. Many years ago I witnessed a fatal case through false aneurism at the above situation, which arose from a puncture, and involved the greatest part of the fore-arm. After the brachial artery had been tied above the cavity, which was gorged with coagulum, the bleeding certainly stopped, but returned in the form of parenchymatous and arterial hæmorrhage. On cadaveric inspection a high bifurcation of the injured ulnar artery, mortification of the cellular texture, and lesion of the muscular substance were discovered.

The above method of operating applies to false aneurism occurring in other situations.

2. *Of the Operation for True Aneurism in the Popliteal Space, by Tying the Femoral Artery at some distance.*

The tying of the femoral artery for aneurism of the popliteal possesses several advantages over Anel's method of placing the ligature in the immediate vicinity of the pulsating tumour. Of these the chief is, that the vessel is tied at a healthy spot. In the proximity of the aneurism, on the other hand, it is always more or less unsound, its walls are thickened, closely adherent to the adjunct parts, and for the most part brittle; hence the ligature is prone to cut its way rapidly through, and occasion serious hæmorrhage afterwards. The alleged advantage that, by ligation in the proximity, a greater supply of collateral branches will be obtained, and, consequently, less risk of the death of the limb, is merely hypothetical. The blood naturally descends in the artery as far as the vicinity of the diseased locality, and there meeting with an obstacle, the current deviates from its course, whereas, if the artery be tied at some distance above, the blood finds a ready channel into the healthy texture, and is more equably distributed over the middle and lower parts of the limb; of course, judicious after-treatment is of paramount importance.

The reader will find directions for tying the femoral artery for popliteal aneurism in Chapter IX.

Immediately after the noose is applied and the knot made, all pulsation ceases. In the instance of small recent aneurisms with thin membranous sacs, and which contain but little coagulated fibrin, the swelling vanishes almost entirely. Old and very voluminous aneurisms lessen only in bulk, and continue to manifest during the first period after the operation, a kind of low muffled murmur. Then all becomes still, and the tumour feels sometimes compact, sometimes doughy, according as the sac possessed hard solid walls, or owed its distension to large masses of blood deposit. It is rare for distinct pulsation to continue, and still more rare for it to increase. This can only happen from the circum-

stance of anastomosing vessels opening into the sac, or from the blood issuing out of branches which empty themselves into the vessel between the site of ligation and the sac, or through regurgitation of blood from the inferior portion of the femoral artery. This phenomenon of the enlargement of the aneurism after operation, "secondary aneurism," might require a repetition of the ligature at a greater depth. The operation, however, ought not to be rashly undertaken, or before a fair trial has been given to a cooling and derivative treatment. Wedemeyer relates, (*Rust's Magazine*, vol. vi. p. 220,) that after ligation of the femoral artery an aneurism of the popliteal burst, which necessitated the performance of amputation.

The nervous symptoms which follow the operation are a sense of creeping over the limb, often loss of sensation, frequently a feeling of augmented warmth, sometimes of chilliness. The extremity seems at first somewhat hotter than natural, but the temperature usually sinks.

It is impossible to point out any uniform line of treatment. With young and vigorous subjects an antiphlogistic course may be pursued, while with those that are enfeebled, and in whom the aneurism is bulky and of long standing, a more stimulating plan will be proper. Warm acidulated drinks, tea, infusions of arnica and serpentaria where torpor prevails, may be exhibited, and as topical means resort may be had to thick woollen cushions, inwrapping in cotton wool surmounted with flannel, hot bags filled with aromatic herbs. In several cases which came under my notice, and when the limb, despite of the above remedies, remained cold, and blue spots had made their appearance on the surface of the skin, I succeeded in saving it and restoring the patient to health by means of the continued employment of aromatic vinous cataplasms, aided by the internal administration of mulled wine.

Should death of the limb ensue, a natural separation of the mortified textures will be effected, provided the patient does not succumb from exhaustion. This event is rare, and can generally be warded off by energetic stimulant treatment. Out of a large number of cases of popliteal aneurism, I have only known it occur twice. One of the patients was saved by amputation; the other died.

The treatment of the wound offers nothing peculiar. The diminution of old voluminous aneurisms is a very tedious process, but considerable advancement may be made, in a year's time, by the inunction of iodine and mercurial salves, together with moderate pressure.

3. Of tying the Aneurism below, in the Proximity of the Swelling.

This operation, proposed by Desault and Brasdor as one of exigency, is based on the assumption, that the blood which cannot get vent from the sac, will stagnate therein, coagulate, be eventually absorbed, and thus bring about the obliteration of the cavities of the sac. The operation may be certainly deemed bold and ingenious, proffering, as it were, a remedy in the most desperate cases. The circumstances in which it is indicated are those in which the aneurism approaches so near the heart, that no ligature can be applied in the interspace. For the sake of not letting the patient die without surgical assistance, the artery is tied on the opposite side, what might properly be termed the wrong, but which happens here to be the right side.

The operation may be resorted to in aneurism of the common carotid artery, which happens to extend upwards as far as the division of the carotids, and downwards to the clavicle; likewise, in aneurism of the arteria innominata, conjoined with a simultaneous aneurismal condition of the carotid or subclavian; further, in aneurism of the subclavian artery verging upon the innominata; and in aneurism of the external iliac, when so voluminous that ligation cannot be performed above the tumour.

This method, which has been condemned by many surgeons, especially by Deschamps and Sir Astley Cooper, in consequence of its sometimes proving unsuccessful, is, nevertheless, deserving of a trial, where all other measures are fruitless. The excellent observations of Wardrop, Lambert, Evans, Bush, Mott, and Montgomery, who tied the carotid in this manner for aneurism, serve to confute all captious objections against an operation which has been placed on a proper footing by Chelius.

In performing Brasdor's operation, it is not expedient to tie the vessel too near the sac, lest the error of Anel's procedure be incurred. The thickened and diseased coats of the artery are thereby exposed to concussion from the opposing current of blood, and to section from the thread. By way of after-treatment, the surgeon may have recourse to gentle pressure upon the swelling, the application of cold, and the abstraction of blood.

MEDICAL REFORM.

TO THE GENERAL PRACTITIONERS IN MEDICINE, SURGERY, AND MIDWIFERY.

GENTLEMEN,—In a former letter I took the liberty of reminding you, that you would very shortly be invited to attend a public meeting in London, for the purpose of considering the present aspect of medical affairs. I have no doubt, that upon that occasion, every one who can spare the time will make a point of attending, and that he will have made up his mind to the necessity of strenuously urging for such alterations in the laws affecting the Medical Profession which in his judgment will secure from deterioration his present professional and social status, and enable him to advance the acquirements of the future members of his class, in accordance with the continually increasing improvements in medical and surgical knowledge.

Before we proceed any further, therefore, it would be well to consider what is the present position of the Medical Profession in this country, especially as respects its present mode of practice. Medical practice, to suit the public convenience,—and, be it borne in mind, by the public themselves,—has been appropriated to three orders of practitioners,—Physicians, Surgeons, and Surgeon-apothecaries or General Practitioners. To this arrangement the Profession has merely given their assent; it did not originate with the Profession, but in the caprice or whim of society; and the wealth and luxurious habits of a population in a very advanced stage of civilisation and refinement have, in a still greater degree, *specialised* the agents through whose ministrations, their ailments, real as well as imaginary, are to be removed or mitigated; hence the reason why dentists, aurists, cuppers, and electricians, each following their own particular branch, are to be found in every quarter of a populous town or neighbourhood. Now, gentlemen, I have no hesitation whatever in affirming, that in all the remarks on this subject that have been made from time to time, even by the members of the Profession themselves, the parties at whose instance this subdivision of Medical practice has been brought about have been entirely and completely lost sight of. Medical men have, very erroneously, fancied that the Medical corporations have been the originators of this condition of Medical practice, forgetting entirely the fact I have before related, that it is the public, and the public only, who have created the present tripartite subdivision of the Medical Profession, and that neither the Profession nor the Medical Corporations have had any voice whatever in the matter, other than to succumb to the unmistakeable expression of the public will and inclination. If, therefore, it be admitted that, by the popular voice, the Medical Profession be pronounced to be tripartite, and that Physicians, Surgeons, and Practitioners in Medicine, Surgery, and Midwifery, are each, in their way, suited to the wants of populous and wealthy communities surely it must be impolitic to expend our time in futile attempts to alter this state of things. Should we not rather direct all our energies to one great object, namely, the ensuring that the latter be sufficiently educated to meet the daily emergencies of practice, as they must ever be the medical attendants of the majority of the population, whether in town or country?

The question at once arises, how can the Medical Profession most effectually meet the requirements of the public on the one hand, and secure their own efficiency, and maintain their own independence on the other? Clearly the best way would be by having a distinct College for each class of Practitioners, totally independent of each other. A College for Physicians, a College for Surgeons, and a College for the Practitioners in Medicine, Surgery, and Midwifery. Each College should be accessible to every one who was eligible to be enrolled amongst its Members, and who would conform to its by-laws; and it should be compelled to admit, *ad eundem*, all those persons who had been similarly educated in other parts of the kingdom, who desired to be so admitted, and who could give satisfactory proof, that their education and character of practice were in accordance with its rules and regulations. On the other hand, every person desirous of engaging in Medical practice, should be compelled to enrol himself in one or other College, prior to his being permitted to engage in such practice, to pay the usual fees on enrolment, and also to sign a declaration pledging himself to conform to all the bye-laws, rules, and ordinances of the College. Gentlemen, after a very careful and lengthened consideration of the subject of Medical Reform in all its aspects, and, looking attentively at the present arrangement of the Medical Profession, and perceiving that this arrangement of the Profession has been effected by the public solely, and for the public convenience, I conscientiously believe, that the General Practitioners have no alternative as a means of self-preservation, but to agitate for a separate Incorporation for themselves. It is useless, attempting any longer to convert the College of Surgeons into a College of Medicine and Midwifery, as well as of Surgery. The Council of the College of Surgeons have repeatedly affirmed, that they will never consent to such an alteration in the constitution of the College; and no Government has yet been found willing to force such an alteration upon them against their consent; and as the public will, under any arrangement of the Medical Profession, still continue to create distinctions, and to maintain separate classes of Professional men for particular departments of practice, the General Practitioners, under any arrangement, comprising only two Colleges, would be, beyond all question, fixed in the third or subordinate grade, and without the slightest chance being afforded them of escaping from such a position; they would, in fact, be the mere offsets of the two special Colleges.

I take it for granted, then, that a new College for the General Practitioners, with full and ample powers to improve the qualifications, and secure the due efficiency of its members, will be one of the first things agitated for by the general meeting.

Remember the rapid organization of the National Association of General Practitioners which, in a very few weeks, numbered upwards of 4,000 members, to resist what was deemed at the time aggressive legislation, attempted to be carried into effect at the instigation, and to promote the aggrandizement of the Colleges of Physicians and Surgeons, at your expense; and also remember how completely that scheme was thwarted by the attitude you assumed upon that occasion. Your demand for a new and independent College carried absolute dismay into the camp of the special Colleges, and arrested at once all attempts at legislation upon such narrow-minded and exclusive principles. An effective organization and demonstration in favour of a College of your own is unquestionably your best policy at the present moment; and it is not only the best, but almost the only method whereby the General Practitioners can maintain and improve their present professional status. *The strongest argument in favour of your adhering steadily to your demand for corporate rights and privileges in a College of your own, is, that the project is, and always has been, so strenuously resisted by the Colleges of Physicians and Surgeons.*

I am, Gentlemen, your sincere well-wisher,

A GENERAL PRACTITIONER OF 25 YEARS' STANDING.

March 18, 1850.

TO THE GENERAL PRACTITIONERS OF THE UNITED KINGDOM.

GENTLEMEN,—The whole question of Medical Reform appears at the present moment to stand in such a position as to render it a duty towards his Profession, incumbent upon every one of you to

speak his mind on every main particular connected with it. An extensive expression of opinion through the Medical Press as well as by earnest efforts, to attend public meetings called by the National Institute, must have the effect of strengthening the hands of those who have been most devoted to your interests.

You are now at direct issue with a self-elected few, who are striving, with singular impudence, to deprive many of you of a well-earned, and what you have been accustomed to consider an honourable distinction, and at the same time to elevate themselves to a title which few of them can truly claim.

The Associated Surgeons have been as unceremoniously treated as the upholders of the National Institute. They must now make common cause with their brethren; so, also, ought the Manchester Committee, notwithstanding its "distrust and dislike" of the proposed third College, and a numerous class who have hitherto, for divers reasons, kept aloof from the contest which has so long agitated the Profession. It is only by such combination, showing unequivocally your resolution to effect a comprehensive measure of reform to which a large majority of you will adhere, that Sir George Grey will be determined in the course he will soon have to adopt in consequence of the recent steps taken by the Council of the College.

Your emancipation from the College yoke, your elevation to your just place in the Profession, and of the Profession at large, to its proper political station, must be first accomplished, and then, and not till then, will you be in a position to modify or to remove the unjust burdens thrust upon you.

The Committee of Union Surgeons will, I fear, be unable to effect their well-intentioned object of removing one of the most flagrant pieces of injustice which has been allowed to oppress any portion of the community until it can be backed by a more influential body than at present exists; and I believe it matters little whether the Union Medical officers stand in connexion with the Poor-law Board or the Board of Health—the one has, perhaps, no more legal power to help them than the other—and without *legal* power it is almost useless to complain.

The General Practitioner, though a most useful slave to the public, is almost unrepresented in Parliament; compared with the members of other Professions he is almost a nonentity; and how is this? A few words will serve to indicate the cause as well as to point out the nature of the remedy. The knowledge of those sciences to which the Medical Profession owes its very existence is necessarily of slow growth; it has, consequently, only of late years, by the growing intelligence of mankind, been emancipated from the thraldom of ignorance and superstition.

The instincts of our nature, and the revelations of the Deity from the time man was first placed upon the earth, made religion take an early and prominent place in the minds of men, and invested its ministers with a peculiar reverence from the earliest ages of the world. The exercise of brute force and of arbitrary authority is an easy task compared with the patient and laborious investigations of the philosopher; hence the warrior could rapidly, and under any circumstances, since the first origin of human society, start into importance and be as easily appreciated. The necessity of law to oppose unlimited power, to forward the schemes of the ambitious, to regulate commercial intercourse, and a thousand other, both good and bad, purposes, early associated the law-makers and the law-practisers, and gave its professors a strong hold upon society and upon governments. Thus, the Professions of divinity, of law, and of arms, were influential in the world before the Profession of Medicine had any existence as a science; in fact, whilst those who would have advanced it most rapidly were persecuted as heretics and enemies of their race.

It is then under the feeling that the Medical Profession has not in this country reached *the station to which it is justly entitled*—that the energies of its ardent thousands are repressed by the jealousy of its privileged few—that it is not worthily represented in the councils of the state; it is under these feelings that I hail with pleasure the efforts which are about to be made by you for its honour and your own advancement.

I must then call on my Medical brethren to unite,—Members of the National Institute, associated surgeons, Poor-law surgeons, all bodies organised to promote the cause of Medical reform—I call on you all to unite. It is only by union you can succeed; your opponents calculate on your weakness arising out of your disunion. The present is the most critical time for the great body of the Profession which has ever occurred. All must now see they have no justice to expect from their own College; and if you do not now vigorously assert your rights, you must for years to come rest satisfied with a low standing in your Profession, and a powerless connexion with the Government.

The Council of the National Institute deserves well of the Profession; it has stood up for it energetically during several years, and has earned a reputation which ought to make it a rallying point for every Medical practitioner in the kingdom (except the pures.)

Attend, then, the meeting, which it will call early in April, and show by your *numbers* and by your *unanimity*, that you are of one mind in demanding from the justice and honour of England those professional rights and that leading standing in society to which you are so clearly entitled, and which you so richly deserve.

I remain, Gentlemen, yours very sincerely,

Alton, March 19th, 1850. WM. CURTIS.

[We would merely remark, in reference to this excellent letter, that if there were a few Medical men in Parliament, honestly and earnestly devoted to the Profession's interests, the question of Medical Reform would be speedily settled. The Profession should endeavour to supply this want.—ED. *Medical Times.*]

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

MARCH 12, 1850.

Dr. ADDISON, President, in the chair.

A certificate, recommending Mr. R. Phillips, F.R.S.L. and E., as an honorary Fellow of the Society, was read, and ordered to be suspended for the usual time in the library.

Mr. Arnott proposed, and Dr. Nairne seconded, a vote of thanks to the late Secretaries, Dr. Baly and Mr. Le Gros Clark, for their past services. Both gentlemen commended them highly for the manner in which they had acquitted themselves in the performance of their onerous duties, and Dr. Nairne expressly eulogized the high spirit of justice and impartiality they invariably displayed.

The vote was carried unanimously.

ON FATTY DISEASES OF THE HEART.

By RICHARD QUAIN, M.D.

Assistant Physician to the Hospital for Consumption, &c.

(Communicated by C. J. B. WILLIAMS, M.D., F.R.S.)

The author said there were two forms under which fat occurred as a disease of the heart. In the one form, fat tissue grows upon and amongst the fibres—which may still be found unchanged in structure, but more or less distorted in their course by the existence of large fat cells between them. In the second form, the muscular fibre becomes disintegrated and degenerated into a granular or molecular fatty matter. In such cases there is not of necessity any fat growth on or about the heart. He traced the progress of this change in the fibre, as shown by the microscope, and presented in drawings the appearances described. He showed the effects which the presence of this fatty matter in the place of muscular fibre must have on the physical characters of the heart, on its colour, its consistence, &c. He pointed out the circumstances by which the appearances were modified, as well as those which guided us in ascertaining its presence. In the next place, the author gave a very complete account of the extent of our previous knowledge on the subject. He described fatty degeneration as a process of decay or true degeneration. He established this conclusion by a series of observations on the microscopical and chemical characters of the substance called adipocere; by experiments made by himself and others on the artificial formation of fatty matters in albuminous and fibrinous textures external to the body, and by the identity of the appearances in the artificial and the natural process. He mentioned a great variety of circumstances under which this change took place in the living body, in which it must have occurred independently of any direct communication with the vascular system. He quoted the names of several authorities on these points, but more particularly, in reference to their pathological import, those of Williams, Paget, and Rokitansky. The effects of these diseases were described at great length, as also their symptoms and diagnosis, more particularly in reference to fatty degeneration: a distinction being drawn between those cases in which the heart, participating in the general impairment of the health, and those in which the heart, being impaired by local causes, suffered out of proportion to the system generally. The treatment, which in some cases had been found more successful than might have been supposed, was well and forcibly laid down.

The great length of this paper precluded the possibility of any remarks being elicited this evening. It occupied exactly one hour and twenty minutes reading, and was received with considerable applause at its conclusion. We regret much that none of the Fellows present had the tact to move an adjournment of the meeting, with a view to discuss the various points alluded to by the author. There was matter enough in Dr. Quain's very elaborate paper to furnish subjects for discussion for several evenings. We have been compelled, by want of space, greatly to curtail the abstract which we received.

Dr. Burgess, at the previous meeting, exhibited an APPARATUS FOR FUMIGATING THE SCALP, IN CERTAIN CHRONIC DISEASES OF THAT REGION.

This apparatus, which is made by Messrs. Ferguson, surgical instrument makers to St. Bartholomew's Hospital, is extremely simple. It consists of a tin jar, about ten inches by four, with a curved conducting tube, in which is placed a stop-cock, for the purpose of turning off or diluting the vapour, and a vulcanized India rubber cap, fitting close to the head, so as to prevent the escape of vapour in that quarter. The vapour is sublimated by means of a spirit-lamp. Simple or medicated vapour may, by means of this apparatus, be applied to the scalp; Dr. Burgess states that it will be found to be a very efficient agent in favus, ringworm, alopecia, and other troublesome diseases of that region.

WESTMINSTER MEDICAL SOCIETY.

MARCH 2, 1850.

Dr. MURPHY, President, in the Chair.

SYNOVITIS IN AN INFANT.

Mr. Gordon Bailey narrated the case of a female infant, seven months old, of a strumous, irritable habit, and generally out of health from teething; the child, in the first instance, suffered from irritable bowels, with heat of head, hot skin, &c., but soon afterwards from swelling of the left knee, at first something like phlegmasia dolens, but which speedily presented indications of synovitis. The gums were freely lanced on several occasions, alteratives and aperients were given, and the knee fomented, but the inflammation continued to make progress, the swelling increased, and affected the lower part of the thigh; the joint itself was greatly distended, and fluctuations became evident. Mr. Hancock was then consulted, and agreed with Mr. G. Bailey, that it was a clear case of synovitis from constitutional irritation. The tincture of iodine was applied externally, and iodine given internally; two teeth were cut, but the inflammation continued, and the skin became red and pointed. In a day or two the abscess was opened, and two ounces of matter evacuated. The joint was kept quiet for a few days by the application of a splint, which was soon given up, on account of the irritation it caused. The iodine was next omitted, and cod-liver oil substituted, under the use of which the child got fat and improved in health, more especially after cutting three more teeth. The knee then became more natural in size, and the child could move it freely without inconvenience, recovering rapidly and completely. He (Mr. Bailey) brought the case forward, because synovitis is not mentioned by writers as one of the diseases attendant on teething; and Sir B. Brodie says it is very rarely met with in young children.

Mr. Henry Smith thought the case very interesting, as showing the restorative powers of nature, in cases where disease has caused considerable injury in a joint. He then narrated the case of a boy, seven years of age, who wounded his foot by a rusty nail, followed by inflammation, and a few days after by suppuration, and subsequently by caries of the tarsal bones, under which the health gave way so much, that amputation at the ankle-joint was advised, but refused by the mother. The child was kept quiet, the limb steadied by a splint, and the patient ultimately recovered. This case, with Mr. Bailey's, shows, that, in suppuration of the joints, we should hesitate before we have recourse to amputation.

In answer to a question from Dr. Murphy, Mr. G. Bailey said, the tissue was not hard; it was the white shining appearance of the skin which caused him to liken it to phlegmasia dolens.

Mr. Hunt described a case which, he said, had some bearing upon the subject before the Society, and would serve to show that diseases of the joints are obscure, and may deceive even eminent practitioners. A little girl, eight years of age, fell lame and limped; an eminent surgeon who was consulted, diagnosed incipient disease of the hip-joint, and ordered her to the seaside, the joint to be fixed with a splint, and all motion prevented. After the lapse of six weeks the splint was removed, and she could walk without limping. The surgeon under whose care she then was, said there was not any disease of the hip-joint, and the previous complaint became a mystery. In a day or two, however, she was again lame, but recovered after a dose of purgative medicine, which brought away a large quantity of solid matter, the bowels being much confined. It was then supposed that the lameness was sympathetic with intestinal irritation, especially as a second relapse was removed by a purgative, but after this the lameness continued to recur from time to time, for several months, until about eight months after the first occurrence of lameness, she complained of pain in the foot, which was accordingly examined, and a pimple found, in the centre of which was a hard substance. This was extracted, and proved to be part of a rusted needle. After this the lameness entirely disappeared. Mr. Hunt was of opinion that the needle, during these eight months, was travelling down the thigh, and caused the intermittent lameness whenever it came in contact with a nerve.

Mr. Dampier remarked that Mr. Bailey's case was interesting on account of the age of the patient, but still there was not much room for surprise, if we recollect the extreme vascularity of the synovial membrane at that age, and its consequent liability to inflammation.

DELIRIUM TREMENS.

Dr. James Bird read a paper on the types of delirium tremens, in which he proposed to consider the relation of the pure or simple form of this disease to sequent and kindred affections of the brain, of an inflammatory, febrile, and epileptic character. These are now variously arranged in nosological systems as delirium tremens nervosum and traumaticum, phrenesia potatorum, encephalitis tremefacicus, delirium febrile tremens and irritative fever of drunkenness. In order to obtain a practical foundation for the different modifications of this complaint, whether of a simply nervous or inflammatory character, Dr. Bird considered them under the four divisions into which he has classed the phenomena. He characterized each form by a distinct definition of the modifications; which, in a practical point of view, are to be considered as transitions only from less to greater degrees of the same complaint, or the modifications of a like pathological condition, dependent, for the peculiar marks of manifestation, on the less or greater effect of predisposing causes, and the previous morbid changes effected by them in the constitution, particularly in the excretory functions of the liver and kidneys. Should there be any difference of opinion as to the propriety of the nosological arrangement of modifications of delirium tremens, usually adopted by different authors, into nervous and traumatic, idiopathic and symptomatic, and whether such consist in nervous erethism or inflammation, the divisions into simple, inflammatory, pyrexial, and epileptic, as adopted in the paper, will enable the physician to at once comprehend how much nervous or vascular derangement may have precedence; and thus guide his judgment in determining how much the particular symptoms may call for the administration of opium or antiphlogistic remedies. Four tabular statements of these several modifications were given, embracing an analysis of seventy cases. Regarding the natural tendency of the first form to terminate in a salutary and spontaneous sleep, at a period seldom less than sixty or more than seventy-two hours from the commencement of the paroxysm, which may extend, however, to six entire days, Dr. Bird agreed with the observations made by Dr. Ware, of Boston, on this subject. The generality of cases composing the first table seldom ran a course beyond the beginning of the fourth day; though, in some of them, the nervous erethism, and the increased vascular action of the cerebrum, extended beyond this period. In one instance, the symptoms did not subside until the ninth day; but here the exalted nervous sensibility, associated with peripheral irritation, was accompanied, as appeared, by functional exhaustion of the nerves of the cerebral blood-vessels, followed by relaxation of the capillaries akin to inflammation. The inflammatory form of the disease, which, where the irritation is purely cerebral, is a species of *asthenic encephalitis*, is characterised by a greater degree of vascular determination to the brain and its connexions than the first or by a state of inflammation in some of the remote organs, either the stomach or lungs, re-acting on the brain. The third form, which is usually met with in the malarious season of the year, from July to October, is generally an *asthenic form* of febrile delirium, such as occurs during fever in those of intemperate habits. The fourth form, or the epileptic, is analogous to the delirium, coma, and convulsions, induced by certain narcotic poisons, as belladonna and stramonium; between the symptoms of which poisoning, and those of true delirium tremens, a differential diagnosis was given. The diagnosis also between the simple erethismal type and the purely cerebral inflammatory one, was pointed out, and the characteristic symptoms of each detailed. The simple forms of the complaint, particularly in second and third attacks, presents many of the characters of *acute dementia*, from which they differ but little. Dr. Bird thinks, in pathological condition, each renewed attack of the former malady seems to bring the symptoms nearer and nearer those of the latter. In both diseases there is the same lost power of perception and attention; the brain being no longer susceptible of receiving and retaining impressions transmitted to it, and consequently incapable of associating the relations, or preserving the recollection of objects presented to it. The morbid appearances of the brain, and peripheral organs of the chest and abdomen, were then detailed, and the general pathology of delirium tremens given. The *sthenic* or *asthenic* symptoms, which become the objects of treatment, have predominance according as the general nutrition of the system has been well or ill performed; or as the nervous centres are in a state of healthy energy, or of atrophy, with defective innervation. The indications of treatment to be acted on are—1st. To allay the exalted sensibility of the central nervous organs or their peripheries, by reducing vascular derangement and inflammation, by means of mild antiphlogistic remedies, and by the removal of all irritating diseased secretions from organs that re-act on the brain. 2nd. To restore the organs of assimilation to a healthy condition, so as to supply fresh nutrient materials to the blood, and to prevent nervous exhaustion by a moderate allowance of stimuli combined with such materials. 3rd. To eliminate poisoned products from the blood, by restoring the proper excretory functions of the liver and kidneys. To fulfil the first indication, a tartar emetic solution, in the proportion of half a grain of the tartrate of antimony to two ounces of water, with a drachm of tincture of opium, and an equal quantity of nitrous ether or colchicum may be used as an effectual means of doing so. This allays the excitement of the brain, and serves to promote healthy action of the skin and kidneys. When the biliary secretion is morbidly increased, emetics are of great use in allaying the irritation of the stomach. When purgatives are necessary, calomel in large doses, or combined with antimonials and opium, followed by castor-oil, were recommended as the best therapeutic agents, as the too free use of strong purgatives is often followed by increase of excitement. Quiet seclusion in a darkened apartment, where the patient can be watched by a well-instructed nurse; cold douches to the head three or four times daily, and occasionally the local abstraction of blood by leeching or cupping, were the other remedial means recommended. Moderate quantities of thin sago or arrow-root, with wine, brandy, or gin, must be given according to circumstances, in fulfillment of the second indication; and, in carrying out the third, Dr. Bird highly recommended the free administration of calomel, in combination with diuretics, to restore the impaired function of the liver and kidneys.

Dr. Semple expected to have heard the reading of a series of cases peculiarly illustrative of a rare form of cerebral disease, but the author had included cases of every inflammatory disease of the brain, and all cases of cerebral erethism. Delirium tremens is a somewhat rare disease. He found fault with the paper, because other diseases had been described with the delirium tremens. All cerebral diseases, caused by drinking, are not instances of delirium tremens. Drinking may cause, besides intoxication, acute mania, which may disappear and not leave any bad effect behind; and, also, a kind of delirium which is not delirium tremens. All these require a difference of treatment. In the delirium he would bleed freely, but that treatment would not do in delirium tremens. This latter is a peculiar combination of excitement and depression, and requires a peculiar mode of treatment, which has been hinted at in the paper, but mixed up with other matters.

Dr. Lankester remarked, that true delirium tremens may arise from many causes besides drinking, such as inanition, excessive study, great exhaustion, or in any circumstances under which persons are deprived, to a great amount, of the nutrition of the nervous system. It may be brought on by mere want of rest,—of sleep, or of nutrition. These two causes may be combined together. In the other varieties described by Dr. Bird, there is this element in operation, combined with other diseases. With regard to the treatment, it must be different, according as this element of disease occurs singly, as in pure delirium tremens, or surrounded by other diseases. What is the best plan of treating the pure disease? Is it by opium, calomel, chloroform, or by what? He (Dr. Lancaster) could not think a case properly treated if opium were excluded. He knew of Dr. Ware's cases, which got well without any treatment at all, but they were not well detailed. There are present great restlessness and sleeplessness; and these are cured by opium. But, again, there are cases in which opium fails. In Corfe's cases, the calomel cured by removing matter which kept up the excitement; or they might have been cases similar to those of Dr. Ware, in which the disease wore itself out. He (Dr. Lancaster) knew of a case, in which ether had been used successfully. He would wish to ask the Society their experience with respect to chloroform in treating this disease. He should be inclined to try it, because it appears likely to cause sleep, and if it does, it is better than opium, which, when given fully, may cause the patients to sink into a sleep from which they may never wake again.

Dr. Snow would be inclined to call Dr. Bird's essay a paper on the cerebral diseases produced by alcohol; there were facts and cases in which it were most valuable. The term, delirium tremens, is not applicable to all cerebral diseases caused by alcohol, and, at the same time, is applicable to others not caused by it. He (Dr. Snow) did not consider the inhalation of chloroform would prove so useful in treating delirium tremens as opium. He had tried it in a few cases, and was obliged to give opium afterwards. He had heard, however, that Dr. Todd, in a case at King's College Hospital, had failed with opium, and succeeded afterwards with chloroform. It might be of service in those cases in which opium is unsuccessful. In one case, a patient of Mr. Marshall's, he nearly rendered the person insensible; but, as the effect wore off, the disease returned. The illusions were rather those of hearing than of sight. Opium afterwards cured the disease. Dr. Snow then mentioned a case of congestion of the kidneys, causing renal convulsions. When recovering, the patient was affected with delirium tremens, although not a drunkard nor given to drink. Fearing to give him opium, the inhalation of chloroform was tried, but it produced the most frightful convulsions. A full dose of opium was then given; it produced rest, and the patient became convalescent. Opium and chloroform had been mentioned as narcotics, and alcohol as a stimulant, but the difference is only in degree.

Dr. William Ryan, in justice to Dr. Bird, must say, that the confusion of cases attributed

by the last speaker does not appear to exist. As he understood the paper just read, Dr. Bird brought forward well-marked cases of delirium tremens; and he must differ from Dr. Semple, who calls it a rare disease. It is, unfortunately, too frequent. No man called in to a drunken person is likely to call that case, *per se*, one of delirium tremens; nor is he likely to call the morning cerebral excitement, succeeding a night's debauch, by that name; at the same time that he will watch it as the possible commencement, as indeed it often forms the first stage, of the disease. True delirium tremens has characters so well marked, as to render the diagnosis generally easy, and, in the treatment, the symptoms must ever be looked to regarding the anæmic or sthenic character of the complaint; though the brain is generally in a state of anæmia, particularly as regards the after stages, yet it cannot be denied, that well marked cases of inflammation of the encephalon sometimes usher in the disease, or sometimes supervene in its course; and, though bleeding is much to be deprecated in general, yet, where true inflammatory symptoms exist, it should be employed. Great caution as regards arteriotomy is requisite in such cases, as the patient *shows extreme cunning* in getting again to the brandy bottle, and so re-producing the delirium, in which case, as once happened in his own practice, the patient may pull off the scab of the almost healed wound, and produce alarming hæmorrhage; this he may do again and again, when the wound is on the point of healing, to the great annoyance of his surgeon. Dr. W. Ryan regretted more had not been said of the treatment. He asked whether the system of trotting the patient up and down, by successive relays of attendants, until extreme exhaustion took place after hours of fatigue, and then allowing the patient to sleep, might not sometimes be attended by sudden sinking. He wished also to hear the opinions of the Fellows as to the tartar-emetic treatment. In treatment, it is most important, first of all, to correct the secretions by warm, antacid purgatives, such as magnesia, rhubarb, and ginger, with the essential oils, with an occasional dose of calomel, recommended by many, and, as Dr. Bird remarks, among others, by Dr. Corfe, whose opinion, on any medical subject, Dr. W. Ryan thought of the highest importance. This may be done, even to lowering the patient, and then opium strongly seconds the efforts of the medical man; but the person who, without discrimination, and without first correcting the secretions, where the system is saturated with bile, and the action of the kidneys in abeyance, empirically begins with opium, will commit a grievous error. The statistics of the complaint amongst the lower class of drinking women would be desirable.

Dr. Snow referred to the discovery made by Dr. Bence Jones, that the quantity of the phosphates in the urine is diminished in delirium tremens, and increased in inflammation of the brain. He thought this a very important fact.

Dr. James Bird had seen a great many cases of the disease during the thirty years he had been in India, and he believed the cases he had analysed and tabularised, would prove he was in the right. After mentioning the symptoms which characterise the disease, Dr. Bird commented on Dr. Semple's remark that the disease was rare, and that he (Dr. S.) had seen but few cases. He (Dr. B.) had not seen it in this country. His experience had been gained in another climate, where the nervous erethism ran very high; the excitement of drink, aided by that cause, and the high temperature of the country, producing all the varieties of the disease that he had enumerated. Cases will begin with simple erethism, but, if unchecked, will pass on to inflammatory action, either of the cerebral substance, or in connexion with the peripheral organs. The cases of the epileptiform variety began with all the symptoms of delirium tremens, and terminated in coma. Epilepsy itself does not characterize any special disease, any more than does delirium tremens. He objected to heroic doses of opium or chloroform being used in the treatment of the disease, which may subside of itself, because these remedies may produce coma, and the patient may never wake again. He had seen an ounce of opium given. It caused coma and sanguineous apoplexy, with effusion of blood into the substance of the brain.

CORRESPONDENCE.

HOMŒOPATHIC STATISTICS.

[To the Editor of the Medical Times.]

SIR,—The leading Medical Journals having been pleased to notice with approbation my exposure of the late flagrant attempt to pervert a very simple ailment, the result of debauch, fatigue, and exposure to cold, into a case of hydrophobia cured by homœopathic treatment, I may well pass over, without further notice, the puerile strictures upon the case which appeared in the January Number of a publication called the *British Journal of Homœopathy*.(a)

My apology, then, for introducing now into your valuable pages, even the name of this recognised organ of the homœopaths, is, that from it I may abstract a veritable "list," numerically and particularly, "of homœopathic practitioners in Great Britain and Ireland;" and, by a brief analysis, show how much truth is to be found in the rumours of their vaunted numbers, and of the amazing progress which homœopathy is said to be making in London.

1st. Of London.

The population of London amounts to about	2,200,000
The number of medical practitioners, practising in London, whose names appear in the "London Medical Directory, is..	2,571
The number of homœopathic practitioners, practising in London, according to the accredited "list," in the *British Journal of Homœopathy* for January, 1850, is....	48

Of these 48 homœopathic practitioners, 22 are *not* in the "London Medical Directory" at all; and, of the 26 which remain, 10 are graduates in medicine, and 16 are surgeons or surgeon-apothecaries.

Of the ten graduates, 6 appear to have the Edinburgh degree, 1 Aberdeen and Paris, 1 Aberdeen and Tubingen, 1 Aberdeen, 1 Erlangen.

Of the years in which they graduated I shall speak hereafter.

2nd. Of the Provinces.

According to the "Provincial Medical Directory," there are of medical practitioners, practising in the provinces .	8,327
According to the "homœopathic list," already referred to, there are of homœopathic practitioners, practising in the provinces.....	52

Of these 52 homœopathic practitioners, 16 are *not* in the "Provincial Medical Directory" at all; 4 are in it, but their qualifications are not vouched for by the Editor of the Directory; and, of the remaining 32, whose names appear in the Directory, 18 are graduates in medicine, and 14 are surgeons or surgeon-apothecaries.

Of the 18 graduates, 13 possess the Edinburgh degree, 3 St. Andrews, 1 Glasgow, 1 is an Est. Lic. Lond. Coll. Ph.

There appear, therefore, to be in England, about 10,898 medical practitioners; but, suppose that we make a liberal deduction from this number of 898, as practitioners of doubtful license, and make the number of legalised practitioners 10,000, instead of 10,898; then, out of this number, appears the insignificant proportion of 28 graduates in medicine, and 45 general practitioners who call themselves homœopaths, and who profess to practise as such.

Next, let us give them the advantage of the supposition, that all the homœopaths enumerated in their "list" are legally qualified; and, even then, their number is but 100. Thus:—

1st. Of graduates in London, there are 10 in Directory, (Ed. 6, Ab. and Par. 1, Ab. and Tub. 1, Ab. 1, Erlang. 1,) 14 not in Directory, 1 in Directory, but not vouched for.

In the provinces there are, 18 in Directory, (Ed. 13, St. And. 3, Glas. 1, London 1,) 9 not in Directory, 3 in Directory, but not vouched for; total, 55 graduates in London and the provinces.

2nd. Of General Practitioners, in London, there are 15 in Directory, 8 not in Directory. In the Provinces, there are 14 in Directory, 7 not in Directory, 1 in Directory, but not vouched for; total, 45 General Practitioners in London and the Provinces.

The Homœopath's List further shows, that, out of the 28 graduates, whose names appear in the "Medical Directory," 19 obtained their degrees in Edinburgh, and the years of their graduation are as follow:—1 in 1809; 5 from 1820 to 1830; 5 from 1830 to 1840; 8 from 1840 to 1850. So much for "a snake in the grass" of the Edinburgh Senatus.

The number of homœopathic practitioners in Scotland, appears from their list to be 10; in Ireland, 6; and in the Channel Islands, 1; making a total of 117 homœopaths to about 15,000 *regular* Practitioners in Great Britain and Ireland.

If the numbers given above be incorrect, or understated, the error exists in the Homœopath's own list, which may be seen in the supplement to the *British Journal of Homœopathy* for January of the present year, from which alone I have taken my information. But, since that list enumerates 23 M.D.'s, and 15 Surgeon Apothecaries, whose names do not appear at all in either the "London," or in the "Provincial Medical Directory;" moreover, when we find included in that list, the one homœopathic practitioner in the Channel Islands, I think we may infer that that list contains as many homœopaths as the homœopaths could find.

In concluding this brief analysis, I would beg to bear testimony to the benefit which must arise to the *regular* Profession from that most useful of recent publications—the "Medical Directory," especially should it hereafter be extended to Scotland and to Ireland. It would then become the most useful and the most extensive practical check to quackery in general, and to homœopathy in particular. It would expose the real medical poverty of any cause which is kept up, as homœopathy has been and is, by mere popular clamour.

But it may be said, that we ourselves, by noticing anything so intrinsically insignificant, are elevating homœopathy into an importance which by no means belongs to it. I differ, however, from this opinion; and I consider that the Journalist is the legitimate contemporary historiographer of popular delusions; and that, through the recognised Journals, it is profitable to society to expose the errors of the day, and especially so in this instance, lest it should at any time be said that the Medical Press of England tacitly approved of anything so demonstrably absurd as Homœopathy.

Should you think this communication worthy of a place in your valuable Journal, its insertion will oblige, Sir, yours, &c.,

JAMES INGLIS, M.D.

Halifax, March 4, 1850.

(a) Should any of your readers wish to follow the homœopaths through their perversions and doublings in this case, or to value aright their statistics, as displayed in their ignorance of diagnosis and their non-appreciation of symptoms, I would beg to recommend a perusal of the homœopath's own account of, and their strictures upon, this case, as recorded, first, in the *Homœopathic Times*, of 20th Oct. 1849; and, second, in the number of the *Quarterly Homœopathic Journal*, above alluded to, without one allopathic comment.

CAUSTIC IN STRICTURE.

[To the Editor of the Medical Times.]

SIR,—I regret that I must again claim the indulgence of a space in the next number of your Journal, whilst I, in the first place, do an act of justice to Mr. Wade, by acknowledging, as I now do, that I was in error in thinking that the first edition of my *present* publication on Stricture was published before his treatise on the same subject; and secondly, whilst in justice to myself, I explain how this error arose. It occurred thus: I was certain in my own mind that I had publicly, in print, called attention to the remedial power of the Potassa Fusa in cases of stricture before Mr. Wade had, although I was not sure as to the exact time or medium. Under these circumstances, before I wrote my former letter to you, as I had not a copy of the first edition of my present publication, and had forgotton its date, I applied to Mr. Cox, my printer, for it. He gave me the date as 1839. I then referred to the date on the *title page of Mr. Wade's book*, and found it to be 1841. Hence my statement. Mr. Wade's letter led me to fear that some error had arisen. I therefore applied to Mr. Cox to allow me to look through his ledger, and on examining it, I find that the manuscript of the first edition of my present work was in his hands for publication in the month of October, in the year 1840, and was completed by the 14th of December in the same year; but that, in accordance with what appears a general custom with books printed at the end of a year, the title page bore date 1841. From Mr. Wade's statement that his book was published in 1840, whilst the date on the title page is 1841, it would appear that his printer did the same as mine in this respect. Thus it would seem that both books were at the press at nearly the same time. The error in saying that mine was printed in 1839, arose from Mr. Cox's having, in that year, printed a work of mine on the Stricture of the Urethra, the object of which was to point out certain errors in diagnosis with respect to the existence or non-existence of that disease, and which was unfortunately confounded with the first edition of my present work. It is therefore

clear that I was wrong in my assertion, that the first edition of my present work was published before Mr. Wade's. However, I find that my impression as to the fact of my having called attention to the value of potassa fusa in the treatment of strictures, before Mr. Wade, is entirely correct; inasmuch as, after the death of my late father, I edited, in 1838, a re-issue of his work on stricture, wherein, in my capacity of Editor, I called attention to the treatment of stricture with that remedy, and stated, that "for the last three years I had applied it daily at the Institution(a) with which I am connected; and the result has been such as, if possible, to increase the high opinion I had both of its efficacy and safety."

Mr. Wade fixes the date of his first calling attention to the potassa fusa as a remedy for stricture, on the 15th of Feb., 1840. I am, therefore, on his own showing, entitled to claim the priority of having recommended the revival of Mr. Wheatley's treatment. But the primary object of my former letter was, to contradict the assertion, that Mr. Wade was the FIRST person who applied the kali to IMPERMEABLE STRICTURES. Now Mr. Wade, by quoting the period I mentioned as that in which I first commenced using it in such cases, and SUPPRESSING the accompanying statement, that I claimed no merit in that respect, as it had been so employed by my late father more than twenty years before, endeavours, in an indirect and most unfair manner, to create an impression, that I was wrong in denying the assertion, that he was the first person who applied the potassa fusa to impermeable strictures. In the edition of my late father's work, which I published, there are the details of such cases, so treated, more than thirty years ago. Had I not therefore ample grounds to justify my contradiction? The only error that I have, after all, committed, is, in having mixed up a later with an earlier publication. But the fact, that I had publicly identified myself with the treatment of stricture of the urethra by the potassa fusa before Mr. Wade had, is in nowise invalidated thereby. I therefore trust, that every impartial reader will see, from my explanation, that the error I fell into was as unintentional on my part as unnecessary to the establishment of my claim to having called attention to this treatment before Mr. Wade did.

I remain, Sir, yours truly,

F. B. COURTENAY.

Chandos-street, Cavendish-square,
March 18, 1850.

PRESERVATION OF LYMPH.

[To the Editor of the Medical Times.]

SIR,—I suppose that most Surgeons have experienced, from time to time, in the practice of vaccination, much trouble and vexation, from one or other of the following circumstances:—*Either*, being unable to maintain a continuous source in their own circle, they have failed to get *wet* lymph when they wanted it, from the official vaccinators—an event especially likely to occur when, during the winter or the prevalence of epidemic disease, the poor have no heart to take their little ones to be vaccinated;—*or*, when compelled to employ *dry* lymph, they have found much uncertainty in the results.

When reflecting upon these facts some months since, it occurred to me, that lymph might be prevented from drying by the least portion of glycerine—that very useful agent; for the introduction of which we are so much indebted to Mr. Startin; I at once put this view to the test by dipping the sharp end of a probe in glycerine; and with it touching the lymph I wished to preserve. The object was so perfectly gained by this simple method, that, since that period, I have never been without fluid lymph. Its activity, it seems to me, is rather increased than diminished by the process. I *always* succeed in developing the vaccine disease in its most complete form, even when lymph, kept wet in this way for two months, has been used, as was lately the fact in the case of my own child. I would, therefore, advise Surgeons to adopt this suggestion, and would ask the gentlemen connected with the public Institutions, to do the same in sending supplies of lymph to the country and the colonies, if they will take a hint from so humble an individual as

Sir, your faithful servant,

R. R. CHEYNE.

48, Berners-street, March 15, 1850.

(a) An Infirmary for the treatment of stricture.

THE CONVICT, ANN MERRITT, WHO IS NOW UNDER SENTENCE OF DEATH IN NEWGATE.

[To the Editor of the Medical Times.]

SIR,—At the recent trial of Ann Merritt at the Central Criminal Court, for the murder of her husband, James Merritt, the evidence given by me bore so strongly against the prisoner, was so severely commented on by the counsel for the defence, and has since led to so much discussion on the part of anonymous writers, in one of the daily papers, that I consider it to be my duty to place before the Profession all the facts upon which I based the opinion in question.

The Medical history of Merritt's case is the following:—Late on the night of Wednesday, January the 23rd, the deceased was seen by a fellow workman (Peckeridge), who states that he was then well, except that he had a slight cold. The next morning, at eight o'clock, Peckeridge found him sick and ill; he was in the back yard vomiting, and when he came in he told Peckeridge that he had been drinking some broth, and a cup of hot tea upon it, and he expected it had turned on his stomach and made him sick. Shortly afterwards he complained of great thirst, and went to a public-house, where he drank a glass of rum and water. About a quarter after eleven Peckeridge saw him take some gruel, which his wife, Ann Merritt, had made for him. At one o'clock the sickness had increased so much that the deceased was obliged to give up work and go home. Peckeridge did his duty for him; and on returning to Merritt's house, at half-past five, the witness found him in bed; he was still very sick, and complained of cramps in his limbs. At ten minutes past nine in the evening he was seen by a Mrs. Gillett, who states that he was in bed retching violently, that he complained of great thirst, of a burning pain in his chest, and of a violent pain in his stomach. "I gave him," says the witness, "water half a dozen times, and the deceased asked my husband, who had accompanied me, to go and fetch Mr. Toulmin, the doctor. My husband did so; and shortly afterwards that gentleman, with his brother, came to see him." Mr. Toulmin found him in the state described by the last witness, "*retching violently*." At twelve o'clock p.m. the deceased died, having been ill for at least sixteen hours, and in bed for more than six of them.

On making a *post-mortem* examination of the body, Mr. Toulmin found three quarters of a pint of undigested gruel in the stomach; and on analysing this liquid I discovered that it contained eight grains and a half of white arsenic, *not in a solid state*, as some anonymous writers have assumed, *but in a state of solution*. The intestines contained exactly one pint of fluid matters, in which *there was only a trace of the poison*. Four ounces of the liver yielded about one-tenth of a grain of arsenic.

All these facts clearly indicate that the deceased had died from the effects of arsenic; and the only question to be solved was, when, and by whose act, did the poison gain access to his body?

It was admitted by the prisoner that she had purchased white arsenic a few days before her husband's death; that her object in so doing was to commit suicide; but, that having altered her mind, she took the arsenic out of the papers in which it had been served to her, on which the word poison was both printed and written, in order to guard against accident, wrapped it up in another paper, and then put it away in a cupboard, among some soda powders, which her husband was in the habit of taking; upon which it was argued by her defender, that the deceased had taken the poison by mistake early in the morning, and that the wretched woman was only culpable in so far as she was the passive cause of the fatal mistake.

To meet this view of the case, however, I was asked, both by the learned judge and the counsel for the prosecution, whether I could form an opinion as to the probable time that the gruel and the arsenic found in the stomach after death, had been in the living body of the unfortunate sufferer. In answering this question, I had to bear in mind that the deceased had been vomiting incessantly during the whole of the day, and even up to the tenth hour of the night; that the poison was in a state of solution in a large quantity of undigested gruel; that such fluids generally pass quickly into the circulation, or else onwards into the cavity of the intestines; and that the poison was confined almost entirely to the stomach, but little of it having made its way into the channel of the intestines. With all these points, therefore, before me, for guidance and consideration, I concluded that the matters in question had not been in Merritt's stomach for more than four hours previous to his death; for thus I argued—Is it probable, that a dose of arsenic taken early in the morning, would have remained in the stomach for upwards of sixteen hours, in spite of the incessant vomiting, the drenching with tea, soup, grog, gruel, and the copious draughts of water which the poor sufferer is said to have taken? But, supposing for one moment, that such a result could have happened, then the fluids found in the intestines ought to have contained at least as much of the poison as those found in the stomach after all its retching, purging, and drenching.

Add to all this another chemical fact, which bears strongly on the point at issue, namely, that arsenic, has no similarity whatever, except in its appearance, to soda powder; for it neither tastes, nor effervesces, nor dissolves; nor does it, indeed, behave in any way like either of the powders to which the prisoner refers; and it is hardly possible for us to suppose that the deceased, who was, it appears, accustomed to the use of soda powders, could have taken white arsenic in lieu of them, without instantly discovering that something or other had gone wrong in the matter.

Having stated the case as simply as possible, I refrain from making any lengthened comments on the remarks made by the prisoner's counsel, or on the pretended criticisms advanced by certain anonymous correspondents in the columns of one of our daily Journals. To the latter, however, I will say, by way of caution, that it is not the custom, either with men of science or with those of good breeding, to make attacks on the sentiments or opinions of others in an assumed garb; to fight, as it is justly said, like a ruffian in a mask and in concealed armour; for, while on the one hand, such a mode of proceeding protects the assailant from those censures, criticisms, and castigations which he too often deserves, so, on the other, it deprives the public of all knowledge concerning the skill, the judgment, the experience, and, in fact, the whole animus and authority of him who has been bold enough to put forth his opinions.

To the former gentleman, namely, the advocate for the prisoner, I have but to say, that the observations made in Court, by the Lord Chief Baron, were a sufficient rebuke to the disparaging language in which he spoke, not only of the Medical Profession, to which I, the unfortunate witness, have the honour of belonging, but of the whole body of science generally. Such animadversions, said the Judge, are not only unealled for, but they are unbecoming; for when men of science present themselves here for our instruction,—in order that we may be informed on subjects with which we are avowedly ignorant,—it is our duty to treat them with respect, to consider the value of their experience and special learning, and to place much reliance upon the opinions which they offer to us for consideration.

Secondly. With regard to the anonymous writers referred to, one of them ("Alpha") founds the arguments, which he most unbecomingly uses against me, on the erroneous supposition, that I have advanced a new theory of digestion; that I am ever speculative, and was wrong when I asserted, on a former occasion, in that very same Court, that arsenic would, under certain circumstances, burn with a blue flame. All this, Sir, is without the foundation of truth; for, in the first place, I have not advanced a new theory of digestion, but have simply expressed an opinion in accordance with the many undisputed facts,—those of Dr. Beaumont,—which have been before the Profession for a period of seventeen years.

Thirdly. I was not mistaken when I asserted, at the trial of Sheridan in 1847, that arsenic, wrapped in paper, would burn with a blue flame. This was not a hypothesis created, as Mr. "Alpha" says, in my own imagination; but it was the expression of a fact, previously ascertained in the presence of many scientific witnesses, by the most rigid experiments. And, that I was right in my opinion is proved by the circumstance, that a new test for arsenic has been founded on this very property which arsenic possesses of communicating a blue tint to flame.

Fourthly. The extracts apparently made so truthfully by "Alpha," from the Sessions paper of Jan., 1848, in the hope of sustaining his charges against me, are one and all mischievous perversions of the truth.

And lastly. In a subsequent communication he has even gone so far as to coin a name and a story about modesty to suit his purpose, for he speaks of a "Dr. Hirst, of St. Thomas's Hospital, who there holds the office of Lecturer on Chemistry," and he compares his modest demeanour with my bold speculative assurance.

I am aware that much has been said by another anonymous writer against the soundness of my opinion. It has even been asserted by him that my opinion is contrary to the experience of our greatest

toxicologists; but those who are capable of recognising the true bearings of this question, and who are conversant with the literature of legal medicine, need not be told that the cases of poisoning by arsenic hitherto recorded, are not at all at variance with the opinions which I have here advanced. There cannot be a doubt that arsenic has often been retained on the stomach for many hours, and in some cases for many days; but in these instances there was either no vomiting to remove the poison, or it was administered in large granules, and consequently could not be floated away by liquids, or else it was found after death adhering to the walls of the stomach, offering in all of these respects great dissimilarity to the circumstances of the case in question. And I cannot but conclude, however much I reflect and re-reflect on the important case before me, that, if I am to found my judgment upon actual general occurrences instead of assumed special instances, the poison found in Merritt's stomach had been administered to him after he had taken to his bed. Nevertheless, it is my duty to admit that it is within the range of possibility for this occurrence to have happened otherwise. It is even possible that the poison might have been taken, as the condemned woman asserts it was taken, early on the morning of his death. But, in admitting such a possibility, I am driven to the necessity of entertaining many improbabilities, and I hardly know whether I should be justified in so doing, notwithstanding that this woman's fate is dependent on my opinion.

Believe me to be, yours, &c.,

H. Letheby, M.B.

London Hospital, Tuesday.

THE "THREE WARNINGS" OF THE COUNCIL OF THE COLLEGE OF SURGEONS OF ENGLAND.

[To the Editor of the Medical Times.]

Sir,—As Mr. Skey, in his Hunterian Oration, descended to "vulgarisms" towards the General Practitioners of this kingdom, describing them as "amphibious animal," between a trade and a Profession, &c., you, perhaps, will not be greatly shocked if I assume his style in observing, that the editorial remarks of the *Medical Gazette* March 8, 1850, page 418, remind us of the late retrograde movement of the College Council, of their advanced age, and of their infirmities.

FIRST WARNING.

1839. The Council, approaching its one hundredth year of age, became *lame*, lost its power of progressing, and indeed went backwards, when the age for membership was reduced from 22 to 21.

SECOND WARNING.

1843. A Deputation from its Members was not heard by the Council, whereby it was ascertained that the Council was *deaf*.

THIRD WARNING.

1850. It published a "Reply" to the National Institute, stating,—

"3. That it is an Institution especially designed for the promotion of Scientific Surgery.

"5. That it will neither raise its standard of qualification for its members, nor consent to the formation of a College of General Practitioners for producing more efficient surgeons;" thereby showing us, that it is *blind* to the requirements of the community.

The Council proclaimed to the public, in 1845, the inefficiency of its examinations, by a singularly candid confession, made with considerable *naiveté*, quite contradicting its former "statements;" a confession proclaiming, moreover, that its Diploma has become a waste-paper to its possessor, and a trick upon the public, not valued *now*, but from the laws having required it as a testimonial for Poor-law Surgeons. It has become an unfounded published statement—a misrepresentation of facts—and has proved to be a snare, a delusion, and a mockery. That proclamation showed the Council's impaired faculties—dotage.

The Council is now in great dismay and trepidation lest it should be overthrown: but it is not so far enervated, that a New College would be "the death of it," nor so paralysed, that a new one would stumble over it in its onward progress; it is, therefore, supposed, that the old Council will not be, at present, "put out of its misery," and buried in oblivion, but that it will be left to linger on until it dies a natural death.

I am, Sir,

A Member of Thirty Years' Standing.

MEDICAL REFORM.

[To the Editor of the Medical Times.]

Sir,—I feel that these are times in which it has become the bounden duty of every surgeon to speak out boldly and honestly on the subject of the present state of our medical polity, especially in reference to the College on-goings,—and, further, to suggest such steps as, according to his judgment, will be best calculated to remove the protracted evils under which we groan and wince.

In what state are we, at the present moment, as a body of surgeons?

Do we find a confraternity of men of science actuated by one common feeling of *esprit de corps*, and active operation in all which might benefit them, as the most important and most useful class of persons, perhaps, to be found in general society?

Are we a band of thoughtful and earnest gentlemen, each well pleased that his brother and fellow in the good work of alleviating pain and sorrow should stand well in the estimation of the public, and thus contribute his mite to the honour of the corporate body?

Are we entitled to be considered a mass of distinguished scholars, entertaining for each other a hearty sympathy in all matters of hardship to which we may be subject, whether these hardships and grievances may be of a public or private nature? Alas! do we not discover, on the contrary, a heterogeneous and ever-clashing troop of aspirants for medical honours and emoluments, living in most unhappy rivalry, without much feeling in common, or consent in action,—the exceptions to the rule being only manifested by a few scattered associations making convulsive efforts to hold a rendezvous once a year, and pass a few resolutions, which must serve for the ensuing twelve months?

Are we not, in fine, scattered over the face of the land, disunited, comparatively powerless,—cut off from our College, repudiated, bastardised by the rulers for the time being?

I have no taste for agitation, Sir, being an old-fashioned Churchman and a Tory,—if such a thing can be,—but I do firmly demand from my College, that the odious distinction produced—or attempted to be produced—by the notorious Charter be annihilated; and that all members of the College, holding its diploma at the date of the said Charter, be placed on the same level as far as regards conventional distinction. I also firmly, and, as I feel assured, most reasonably, demand the right of voting in the election of the members of the Council, &c.

What! is it longer to be tolerated, that thousands of well-educated men should be pooh-poohed, and treated as wayward children by men in no great respect more distinguished than themselves, except as holding office?

In the name of all that is sacred, in the name of commonsense, and for the sake of our children and children's children, let us be up and doing; let meetings be immediately called in every city and town in the kingdom, and such representations forwarded to Sir George Grey, and the Members of Parliament for counties and boroughs, as shall have the effect of bringing about a settlement of this much vexed question during the present Session of Parliament.

I have only time to add, how thoroughly I go with you in the able arguments which weekly appear in your Leading Articles.

I do not send this for publication, but merely as a personal and individual expression of opinion.

I am, Sir, in haste, your obedient servant,

A Surgeon,

St. Columb, Cornwall, March 16, 1850.

[To the Editor of the Medical Times.]

Sir,—As one who has taken a very long and active part in the struggle to obtain for my Professional brothers, that justice, at the hands of the Legislature, which they, unhappily for themselves and others, think it wisdom to deny, permit me, through your useful and widely circulated Journal, to address a few observations, at this important crisis, to all those who have any desire to shake off the unhallowed fetters with which they have been for so many years oppressed. I can unhesitatingly affirm, the hour is now come when patience even must have an end, and when it is no longer prudent to hold back from the most decided and unmistakeable course of action. If it had been possible for you to have followed your representatives in the National Institute, or in any other Association brought together to obtain redress, through their long, but patient, and oft-repeated remonstrance to the Colleges and to the Government, you would be assured, as I am, that whatever doom awaits these old, chartered, worn-out, and corrupt Institutions, it will not be brought upon them by any desire, on our parts, to be rash and unpremeditated in the course we have determined to take. It cannot be said that we have been premature or unreasonable in our conduct, after all the untiring and persuasive efforts we have made to obtain relief by lawful petitions and remonstrances both to the legally-constituted bodies, and also to the Legislature, which petitions and remonstrances, have been uniformly met by one continued *petitio principii*. Having, therefore, fully made up your minds, that it is no longer wise or reasonable to expect either that the Minister of the Crown or the Council of our Colleges will listen to your demand for justice; you must proceed to take those steps which the deeply injured feelings of the great body of the Profession so fully justify. My unaltered belief is, that as long as our Colleges are headed by such men as now rule over them and the Profession at large, no alteration for the better can be hoped for; for it has been well said, "you cannot wash polluted water;" and as well might you try to place justice on her seat by the side of those men.

I hope, then, that at any sacrifice, these self-elected and unjust counsellors will be cast off by the unanimous, and, if so, the all-powerful aid of the great body of the members. I would not imply by this that I am the advocate for any unlawful acts such as I have heard from time to time threatened. I would rather urge you not to resist the laws by any acts towards such men as will deprive you of your peace of mind or your liberty. They have been appointed by law, whether that law is just or unjust, and who can say whether the powers that be and that are ordained of God, may not by that same power have been permitted to hold these slippery places, that they may become more speedily marked for destruction. But you have a course open to you, that I doubt not is even a more signal punishment than if you were to burn the College down to its very foundation. You can at your own will and pleasure not only make that College, after the conduct you have lately seen it manifest, to be a bye-word and a proverb, but it is in your power also to mark its rulers with such a brand of disgrace and contumely as will make them hate their very existence. You can, as one man, systematically refuse to meet them in consultation, or to join them in company. You can take every lawful opportunity of bringing them, as they deserve, into the contempt and abhorrence of all who regard unfaithfulness and dishonesty of purpose as conduct stigmatising the lowest and the vilest of mankind. How unworthy, therefore, are they to be put forth to the public as your superiors or those whom you profess either to acknowledge or to serve. Come out from them. Let them keep their dead men's bones and all uncleanness to themselves; let them coil themselves up in their own perfections, like the reptiles in their bottles; let them vaunt of their own praises to those who cannot discern their right hand from their left; let them tell their *wonders* and their *infidelity* to those who have neither the power nor the wish to controvert them. But I urge you to show, by the course you are now about to take, that you will not even hold fellowship with men who have robbed you of that fame which, if it were only for the sake of your wives and your offspring, you ought to hold with sacred jealousy. Come out from them publicly. Let every member of the College of Surgeons send up his diploma to some appointed place, and let them all be committed to the flames in the most public manner, in open testimony that you despise alike that institution or that government which attempts to temporise with your feelings by trampling upon justice. No College could resist this, and it would soon be the interest of all to break off from so ignoble and unprofitable a connexion.] Remember they have no Act of Parliament to prevent your practising medicine and surgery. Again, I repeat, come out from them, for no man can touch pitch and not be defiled, and, therefore, if you are lovers of justice and truth, you cannot identify yourselves with them and not suffer a serious loss by the degraded alliance. The Council of the College of Surgeons, for the sake of avarice, have not hesitated to sacrifice the reputation of those of the Profession they call their members, and for this they must answer.

"Perdidit arma, locum virtutis deseruit, qui
Semper in augenda festinat et obructor re."

I am, Sir, your obedient servant,

Cato.

March 18, 1850.

ON GALVANISM.

[To the Editor of the Medical Times.]

Sir,—Galvanism, like many other remedies, has lived, died, and is now again being revived. That it should have run such a course does not detract from its merits as a remedial application; but only declares its abuse and improper employment. I believe

galvanism to be a re
when used in proper
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mitted into Hospital with rete
days' standing; and, having ascerta
was no enlargement of the prostate, or ot
chanical cause existing to produce the disease, I
once commenced the galvanic treatment, introducing one wire, by means of the catheter, into the bladder, while the other was applied along the sacrum, subjecting him to its use thrice a week, for twenty minutes each day. Suffice it to say, without going into unnecessary details, its good effects soon became evident by his regaining the power, at first, of passing water to a small extent only; when there was much urine in the bladder, of completely emptying the bladder; and left the Hospital quite well, after thirty-five days' residence.

I have also employed this remedy in prolapsus ani. As those cases arise from a relaxed or paralysed sphincter, it seemed to me to be reasonable to expect benefit from its use. I received a boy, aged 14, of delicate constitution, into Hospital, who had been labouring under this disease for four years. On his admission the rectum was protruded several inches, and so great was the relaxation of the sphincter that he, speaking from experience, said it would all go up as soon as he got warm in bed, which proved to be fact. The galvanic treatment was commenced by placing one wire, with a small ball, in the rectum, and applying the second along the sacrum, for twenty minutes, every third day. After the fourth application the rectum ceased to protrude, and the boy left the Hospital quite cured.

The next case I would quote is that of a lady, aged 30, widow, suffering from great general debility, profuse leucorrhœa, and spinal irritation, with a fixed pain in dorsal vertebra, unable to walk across her room from debility of lower extremities. In this case, after a long treatment with tonics of various kinds with but little apparent benefit, I subjected her to the use of galvanism applied along the spine, using it steadily twice a week for half an hour each day. At the end of six weeks she had lost the pain in the back, and was able to walk from two to three miles a day.

The next case is that of a medical friend who had fractured his tibia in the lower third; after recovering from which, and going about for some time, he found the skin on the dorsum of the foot quite numb and insensible, with paralysis of the extensor of the great toe. I recommended the use of galvanism, which he applied very assiduously for about one month, when he was quite cured.

I will now conclude, hoping, in the words of Dr. G. Bird, "that I have made out a strong case in favour of this too-much-neglected remedy."

AN IRISH M.D.

CHLOROFORM IN PUERPERAL CONVULSIONS.

[To the Editor of the Medical Times.]

SIR,—May I beg space in your valuable periodical for the insertion of the following, which, if the experience of others shall be what mine has been in this matter, I do not hesitate to assert but that it will be a valuable addendum to our remedial resources in that most distressing and frightful of all things, puerperal convulsions.

On Thursday, February 28, at half-past seven p.m., I visited Mrs. C., aged 24, of florid complexion, &c., in labour with her first child. She was just recovering from a convulsive fit, which had come on during uterine contraction, and was of so severe a character as to have led the nurse and others to suppose that she was dead.

In order, Sir, that I may not be superfluous in my details, it may be only necessary for me to state, that upon examination per vaginum I found the os uteri dilated to about the size of a five shilling piece; having turned the fœtus and delivered, the uterus remained distended upon the abdominal parietes, and the placenta retained.

By artificial means the former contracted and the after was expelled.

patient had five convulsive
supposed exciting cause having
was hoped that the convulsions
This happy expectation, however,
ised; for, notwithstanding the most
ation of the general remedies, the
unabated in severity so as to have
be expected than a speedy dissolu-

his time, (half-past two p.m., of Friday,
1st,) she had had thirty-three confirmed at-
, and nothing having been of any avail in alle-
ng this continued spasm, it was determined upon
try the effect of the inhalation of chloroform.
This was done by means of ten or twelve drops
ing applied to the nose on a piece of rag, imme-
ately upon the rigidity of the lower extremities,
which was always a precedent of the fits.

The effect was the immediate alleviation of the general spasm and the entire destruction of the contraction of the facial muscles; at length the whole body was rendered perfectly passive, after a steady application of the chloroform as above for three hours and a half. The patient was able, on the following Sunday morning, to ask for and to recognise her husband.

She is now, thanks be to God, fast gaining her lost health and strength.

I am, Sir, your obedient servant,

CONTRIBUTOR.

Gosport, March 14, 1850.

POTASSA FUSA IN OVARIAN DROPSY.

[To the Editor of the Medical Times.]

SIR,—My attention has been drawn to a letter in your last Number, wherein Mr. W. Turner seems to consider himself personally aggrieved at my name being coupled with the cure of ovarian dropsy by means of "potassa fusa cum calce." If your correspondent consults my papers "on the Various Modes of Treating Ovarian Dropsy"—(see *Lancet* 1848)—he will not find that I have laid claim to this excellent mode of treatment, which in England and in America is called after my name. On the contrary, I have carefully stated, that the cure of this most tedious disease by caustic had been previously tried by Professor Recamier, of Paris, and Mr. Martin, of Montpellier.

If it is called "Dr. Tilt's operation" it is not my fault, but I can easily understand that it should be called so, because I was the first to fully bring before the Profession a plan of treatment which I have employed for the last ten years, and which was not known in England.

Delighted to find that Mr. Turner has tried the mode of operation which I hold to be good, and still more so to be able to add his successful case to those I am already acquainted with,

Believe me, Sir, your obedient servant,

E. J. TILT.

40, Gloucester-road, Hyde-park,
March 19, 1850.

ADDENDA TO THE PHARMACOPŒIA.

[To the Editor of the Medical Times.]

SIR,—Will you favour me by inserting in your next publication, that the applications for the Chinese emmenagogue, from Medical Practitioners, have been so numerous, that I shall at present be unable to give the time necessary for forwarding it to all; but as soon as those gentlemen to whom I have sent it pronounce in its favour, I shall place it in the power of some respectable druggist, to supply it at a reasonable price, of which notice will be given in your advertising columns.

I am, &c.,

E. WILLIAMS, M.D.

15, Clifton-terrace, Finsbury-square.

PRESENTATION OF PLATE TO THOS. S. FLETCHER, ESQ., BROMSGROVE.—A silver tea-service has been presented to Mr. T. S. Fletcher, surgeon, of Bromsgrove, in testimony of the approbation and esteem excited by his assiduous exertions during the prevalence of cholera in the summer of 1849. The number of subscribers to this testimonial was 238, of whom 178 were working men. The plate bore the following inscription:—"Presented to T. S. Fletcher, Esq., surgeon, by the inhabitants of Stoke Prior, and a few other friends, to mark their sense of his unwearied exertions, professional skill, and great kindness to the poor, during the prevalence of the cholera in the summer of 1849."

HEALTH OF LONDON DURING THE WEEK ENDING MARCH 16.

The deaths registered in the Metropolitan districts during the week were 967, showing an increase of nearly 100 on those of the previous week, and a disposition to rise after a continuous fall during a period of five weeks. The average of corresponding weeks in ten years (1840-9) is 991, which if corrected for increase of population become 1081; the number now returned is therefore less than the average by 114 deaths. Taking, again, the 10 corresponding weeks, it appears that the deaths fluctuated between 792 and 1118, and that the mortality, which showed a decided tendency to increase in later years, rose in the last three above 1000. To account for the excess in the present return over that of the former week, the only epidemics observed to be more fatal, are hooping-cough, croup, and diarrhœa, which numbered respectively 43, 9, and 17 against 35, 3, and 9 of the previous return; but these diseases, except the last, do not seem to prevail more than usual at this season. The 17 deaths from diarrhœa are double the average of 10 corresponding weeks, but in the three weeks of 1847-9, during which years this complaint has increased, they were 10, 19, and 20. The increase is further accounted for by phthisis, the mortality from which has risen to near the average, and amounts to 143 deaths; and also to some extent by bronchitis, from which there were 79, and by pneumonia, from which there were 82, though neither of these numbers is remarkable as compared with returns for the same season in the last three years. The deaths of three persons were registered last week from cholera, of which the following are the particulars:—In Golden-square sub-district, at 174 Regent-street, a chemist died on the 10th of March, at the age of 56 years, of "cachexia (6 months), English cholera (3 weeks)." In St. Mary (sub-district of Marylebone), at 2, Salisbury-place, a widow died on the 7th of March, aged 77 years, of "cholera biliosa (2 days), indigestion." And in West sub-district of Islington, at 24, Albion-grove west, a widow lady died on the 14th March, at the age of 73 years, from "premonitory diarrhœa (16 hours), cholera (46 hours)." With reference to the last case, Mr. Watts, the Registrar, states that "the locality is good, well-paved, and drained, and has a regular supply of New River water." Last week there were registered the deaths of 85 persons in workhouses, of 69 in hospitals, of which 17 occurred in Military and Naval Institutions, and 7 in Lunatic Asylums.

The deaths in the several hospitals of London occurred as follow:—

GENERAL.	
St. George	6
Westminster	2
Charing-cross	0
Middlesex	2
University College ...	0
Royal Free Hospital ...	5
King's College	2
St. Bartholomew	10
London	4
Guy's	6
St. Thomas	6
FOR CONVICTS.	
Hospital Ship, Unité ...	0
Penitentiary Hospital, Millbank	0
MILITARY AND NAVAL.	
Royal Hospital, Chelsea (South)	2
Royal Hospital, Greenwich (East)	8
Royal Military Asylum	0
Coldstream Guards Hos.	2
Grenadier Guards' Hospital	2
Scots Fusilier Guards ...	0
Royal Ordnance	2
Dreadnought Ship ...	1
LUNATIC.	
Kensington House ...	0
Munster-house (Fulham)	0
Normand-house (Fulham)	0
Sussex & Brandenburgh-house (Fulham) ...	0
Otto-house (Fulham) ...	0
Blacklands-house ...	0
Northumberland-house	0
Whitmore House ...	0
Pembroke House ...	1
St. Luke	0
Miles'	0
Warburton's	0
Lunatic Asylum, Bow ...	1
Bethlem	0
Lunatic Asylum, Brixton	0
Retreat, Clapham ...	0
New County, Wandsworth	3
Peckham House ...	2
Camberwell House ...	0
LYING-IN.	
Queen Charlotte's ...	0
British	0
City of London	0
Hospital, York-road, Waterloo 2nd part ...	0
FOR PARTICULAR CLASSES.	
Female Servant Invalid Asy., Stoke Newington	0
German Hospital	1
French Hospital	1
Portuguese Jews' Hospital	0
German Jews' Hospital	0
FOR SPECIAL DISEASES.	
Small Pox	0
Fever Hospital	0
Lock	0
Consumption, Brompton	0

TOTAL, 69.

MORTALITY TABLE.

Deaths in the Week ending Saturday, March 16, 1850.
(Metropolis.)

Causes of Death.	Total.	Average of Ten Weeks.
All Causes	967	991
Specified Causes	964	985
Zymotic (or Epidemic, Endemic, and Contagious) Diseases	149	175
Sporadic Diseases:		
Dropsy, Cancer and other Diseases of uncertain or variable seat	43	58
Tubercular Diseases	198	192
Diseases of the brain, Spinal Marrow, Nerves, and Senses	126	125
Diseases of the Heart and Blood-vessels	42	29
Diseases of the Lungs, and of the other Organs of Respiration	182	178
Diseases of the Stomach, Liver, and other Organs of Digestion	52	58
Diseases of the Kidneys, &c.	13	10
Childbirth, Diseases of the Uterus, &c.	9	11
Rheumatism, Diseases of the Bones, Joints &c.	6	7
Diseases of the Skin, Cellular Tissue, &c.	2	1
Malformations	3	2
Premature Birth and Debility	16	22
Atrophy	23	15
Age	43	66
Sudden	19	9
Violence, Privation, Cold, and Intemperance	38	25
Causes not Specified	3	5

The following is the number of Deaths occurring from some of the more important special causes:—

Apoplexy	34	Heart	36	Phthisis	143
Bronchitis ...	79	Hooping-cough	43	Pneumonia ...	82
Cholera.....	3	Hydrocephalus	27	Scarlatina	12
Childbirth	3	Influenza	1	Small-pox	3
Convulsions...	40	Liver	15	Stomach	3
Diarrhœa	17	Lungs	5	Teething	15
Dropsy	13	Measles	12	Typhus	27
Erysipelas ...	8	Paralysis	21	Uterus	5

BIRTHS AND DEATHS.

	Births.	Deaths.	Births over Deaths.
Males	728	500	228
Females	656	467	189
Total.....	1384	967	417

METEOROLOGY OF THE WEEK.

Day.	Barometer.	Thermometer. Dry.	Dew Point.	Difference between the Mean Temperature of the day and the same day on an average of 7 years.	General Direction of Wind.	Amount of Horizontal Movement of the Air.	Rain in Inches.	Electricity.*
Sunday	30·134	44·4	36 3	+ 4·4	A.M. Calm.	Miles. 75	0·00	Nothing shown.
Monday	30·317	40·6	32·2	+ 0·1	N.	55	0·00	Nothing shown.
Tuesday.....	30·438	41·2	29 9	+ 0·1	N E.	55	0·00	P. and tension strong throughout the day.
Wednesday.	30·372	44·4	35·0	+ 2·9	W.S.W.	40	0·00	P. and tension strong between noon and 3 p.m.
Thursday ...	30·360	41·9	37·6	— 0·1	N.	70	0·00	Nothing shown.
Friday	30·317	37·7	32 4	— 4·6	N.E.	50	0·00	Nothing shown.
Saturday ...	30·108	36·4	32·2	— 6·2	N.W & N.	90	0·00	Nothing shown.
					N.E. & E.			
					N.N.E.			
Means ...	30·292	40·9	33·7	— 0·5	E. & S.W.	SUM 435	SUM 0·00	

* In this Column, A. stands for Active; N. for Negative; and P. for Positive.

MEDICAL NEWS.

Royal College of Surgeons.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College, at the meeting of the Court of Examiners, on the 15th instant:—Messrs. Thomas Watkins Hooper, New Peckham; Henry Anthony, Dungarvon, County Waterford; Edward Henry Bolton, Kennington; Joseph Edmund Kooystra Nadin, Manchester; Daniel Rossiter, Frome, Somerset; William Jeynes, Colford, near Frome, Somerset; George Pain, Army; Thomas Henry Pierpoint, Lindfield, near Cuckfield, Sussex; Thomas Roberts, Prollheli, North Wales; and Thomas James Duthoit, Hoxton-square.

Apothecaries' Hall.—Names of gentlemen who passed their examination in the science and practice of Medicine, and received certificates to practise, on Thursday, the 14th March, 1850:—Stephen Massett Webb, London; Henry Nuttall, Lyston, Leicestershire.

Naval Appointments.—T. B. Rerchas, Assistant-Surgeon, from the Victory, flag-ship, to the Arrogant, steamer, at Lisbon; R. Beith, M.D., Assistant-Surgeons to Greenwich Hospital.—R. W. Clarke, Surgeon superintendent, Barretto; John Wallace, Assistant-surgeon, to the Arethusa; Surgeon Thomas Strattan, M.D. (1847) additional to the Wellesley flag-ship in the North American and West India station.

Military Appointments.—5th Dragoon Guards, Staff-surgeon, second class, George Kincaid Pitcairn, M.D., to be Surgeon, vice James Barlow, retiring upon half-pay. 56th Foot, Acting Assistant-surgeon W. Lawrence Cashel, to be Assistant-surgeon, vice May, who resigns. 75th Foot, Assistant-surgeon John Shaw Willis, M.D., from the 88th Foot, to be Assistant-surgeon, vice Martin, deceased. 88th Foot, Acting Assistant-surgeon John Irvine, M.D., to be Assistant-surgeon, vice Willis, appointed to the 75th Foot. Hospital Staff Surgeon Edward John Burton, M.D., from the 5th Foot, to be Staff-surgeon, second class, vice Pitcairn, appointed to the 5th Dragoon Guards. Staff Assistant-surgeon Thomas Kehoe, M.D., to be Staff-surgeon, second class, vice R. W. Fraser, retiring upon half-pay.

Appointment.—Dr. R. Taylor has been appointed Physician to the St. Pancras Royal General Dispensary, and to the Central London Ophthalmic Hospital, Gray's-inn-road.

The Fellowship of the College of Surgeons.—Of the first 300 Fellows made under the new Charter, the following noted ones are declared:—J. G. Andrews, S. Cooper, H. J. Thomar, White, J. Briggs, T. Callaway, R. Liston, R. R. Pennington, and J. C. Carpue.

Clinical Instruction.—The Court of Examiners of the Society of Apothecaries, in order to improve the system of Clinical Instruction in Medicine, have passed a resolution to the following effect. Instead of the Second Course of Lectures on the Theory and Practice of Medicine, they will admit certificates of attendance upon a Course of Clinical Lectures, delivered in a recognised hospital, by a distinct Professor, such Course to consist of not less than seventy-five Lectures, and to be attended subsequently to the first Course of Lectures on the Theory and Practice. This arrangement is at present permissive, and is applicable only to those schools where there is a distinct Professor of Clinical Medicine; and, in all cases, the student has the option of adhering to the present system, by attending the Second Course of Lectures on the Theory and Practice of Medicine, together with such Clinical Lectures as may happen to be delivered at the School at which he studies. It is hoped, however, that this resolution of the Court will lead to the appointment, at all the Schools, of a distinct Professor of Clinical Medicine.

Exeter Dispensary.—Dr. Budd has been elected physician to this Dispensary, vice Dr. Barham, resigned. A vote of thanks was given to the latter gentleman for his services, and a deputation specially appointed to convey to him the expression of the feelings of the Board of Governors.

A Sum of 100,000*l.* was left in 1846 by Mr. Owens, to found a college in or near Manchester. The trustees now are about to commence proceedings. There are to be six professorships; the salary of the Professor of Natural History is to be 150*l.*, and the same for Chemistry. Natives of Manchester and South Lancashire will have the preference in the admission of children. Latin, Greek, mathematics, natural philosophy, logic, mental philosophy, English literature, history, and moral and political philosophy, will also be taught in the College.

TO CORRESPONDENTS.

"Saline Treatment of Cholera."—Dr. Turley and Mr. Ross.—We have received a letter from Mr. Ross, in reply to Dr. Turley's last communication, denying, in general terms, the correctness of the statements therein contained. But, as the controversy is now assuming a personal character, we take this opportunity of informing our excellent f[illegible]s, that, as far as we are concerned, here it must clo[illegible]

"To remove Stain[illegible]oduced by Marking-ink."—We have obtained for "A[illegible]ld Supporter" the information he requires. Various [illegible]lutions appear to have been recommended for the purpose of removing stains of marking-ink; as, for example, solutions of nitro-muriatic acid, of chloride of lime, and of bichloride of mercury; but none of these agents act well on very old stains. The best liquids are the following:—A saturated solution of cyanide of potassium, in which the stained portion of the fabric is to be immersed for a few minutes, after which it is to be rinsed in clean water, and then washed. Or the stain may be very easily removed by first drenching the part with a strong solution of iodine in iodide of potassium, allowing the re-agent to act for a few minutes, and then steeping the tissue in a strong solution of hyposulphite of soda, (a preparation constantly kept by those who work in photography.) After the treatment, the fabric is to be rinsed in pure water, and then well washed in the usual way.

"Collodion."—We shall be happy to receive Mr. J. T. Davenport's formula for preparing collodion.

"Factitious Mineral Waters."—The analysis must be authenticated before we can publish it.

We decline "Credo's" communication. The visionaries who have conceived it possible for man to support himself in the air, by rendering his body specifically lighter, have not considered, that it is impossible to give to the muscles which move the arms a sufficient degree of strength to enable them to move the machines which are adapted to them; and hence, all who have thus, Icarus-like, attempted to fly, have suffered for their rashness.

"Do Grasshoppers Sing?"—So asks "A Young Naturalist;" and such questions we are well pleased to encourage. They certainly make a noise; and we will take some opportunity to explain to our Correspondent the source of the sounds they emit. These have from the earliest times attracted attention. Archias, a Greek poet, alludes to them as follows.—but we will give a translation rather than the original:—

"Erst on the fir's green, blooming branch, oh, grasshopper,
'twas thine
To sit,—or on the shady spray of the dusky, tufted pine;
And from thy hollow, well-winged sides, to sound the
blythesome strain,
Sweeter than music of the lyre to the simple shepherd
swain."

Melenger also alludes to the source of these sounds:—"excute fecundas pedibus titubantibus alas"—striking thine own speaking wings with thy feet.

We are at all times willing to announce the presentation of testimonials to medical men,—and this as being quite as gratifying to the Profession, as an acknowledgment of services performed by its members, as to the recipient himself; but here our notices must end; for we have room in our columns neither for graphic descriptions nor complimentary speeches.

"Private Asylums."—We decline to insert notices of the escape of patients from private asylums. Accidents will happen in the best-regulated establishment; but they need not, for any *legitimate* purpose, be bruited abroad. We will not be made parties either to envy or to malice.

"Homœopathic Times."—A Correspondent has sent us a number of this journal. We are quite sure that he is wrong in attributing the Article in question to a homœopath at Kensington. That gentleman never wrote anything half so clumsy and pointless. We care not that little dogs—"Tray, Blanch, and Pompey"—bark at us.

"J. Smith, Cove."—You will find the figures of the different kind of starch-cells very well shown in a little book on Chemistry, by Regnault, just out.

"H. O., Ghent."—Schoenbein considers ozone as a result of discharged electricity in the air; it is, he says, insoluble in water; it destroys the colouring matters of vegetable tissues, in fact, the peculiar oxydising agent of the atmosphere; it produces influenza and catarrhal affections in excess; in diminished quantity, perhaps cholera and other affections.

"H., Torquay."—Bromide of Potassium has been used in Epididymitis with the best effects. We never prescribe.

"A Twelve Months' Subscriber."—Go on, by all means. Honesty is the best policy. Write to the Apothecaries' Company yourself; state to them, as freely as to us, the circumstances; add, you are preparing for their examination, and never fear the result.

"A Subscriber."—A general practitioner, who commenced practice before 1815, can recover in the County Court for medicine and attendance.

"S. D., Liverpool."—Probably a representation made directly to the Master of the Company would be effectual, or, at least, elicit a reply. Our Correspondent has no right to an examination for the license; nevertheless, although the authorities are very tenacious respecting the apprenticeship, cases have occurred in which they have admitted the candidate to examination with an informal document of the kind alluded to. S. D. should, therefore, make a fair and correct statement of his studies, testimonials, and position; and if he can offer any reasonable grounds for so doing, we do not doubt but that he will be admitted to examination.

A Correspondent wishes to know where he can procure the metallic teeth in the cheapest market in London; also the gold plate to which they are to be attached.

ORIGINAL LECTURES.

HUNTERIAN LECTURES

ON THE

GENERATION AND DEVELOPMENT OF THE INVERTEBRATED ANIMALS.

By RICHARD OWEN, F.R.S.,

Hunterian Professor and Curator of Museum of Royal College of Surgeons, Corresponding Member of the Institute of France, &c.

[Reported expressly for the "Medical Times," and revised by the Lecturer.]

LECTURE XVIII.

GENERATION OF ARACHNIDA.—Characters of the class, and of its chief divisions.—Androgynous condition of the Tardigrada: conversion of moulted integument into an ovicapsule.—Testes and penis of Mites.—Male organs of Spiders. termination of sperm-ducts remotely from the vesiculæ seminales: transfer of these sacs and the intromittent organ to the end of the cephalic palpi.—Tubular testes of Scorpions and their anastomoses: short sperm-duct and long cœcal sperm-sacs: papilliform penis: Pectinate appendages.—Ovaria and oviducts of Mites and Phalangiæ.—Long ovaria and short oviducts of Spiders: spermatheca and modifications of vulva.—Female organs of Scorpions: developmental pouches of the viviparous species.—Coitus and oviposition of Spiders: their strong maternal instincts: silken and other nests.—Development of germ and embryo; early manifestation of the class-character.—Repeated ecdysis during growth.—Regeneration of parts of Spiders.—Organs for secreting the material of the nests and webs.

MR. PRESIDENT AND GENTLEMEN,—There still remains one class of the great sub-kingdom of arti culated animals, in which we have to examine the organs of generation, and consider the modifications of the functions by which the race is perpetuated. This class is called "Arachnida;" it includes the spiders and other air-breathing *Articulata*, which, like them, are without wings, without antennæ, but have four pairs of legs. As I have reserved this class to the last in the present progressive and ascensive survey of the generative function, you will conclude, that the species composing it are the highest of the Articulate series, notwithstanding they are devoid of those instruments of flight, which were so excellently and variously organized in the preceding class. Many Arachnidans are, in fact, parasitic; a few are aquatic; but the majority are terrestrial. Some, nevertheless, though devoid of wings, can float in the higher regions of the air; but they traverse that element as aëronauts, buoyed aloft on long silken filaments which they fabricate, lighter than air. Some of my hearers have doubtless witnessed this phenomenon during the warm, dry, sunny days, at the latter end of summer.

The Arachnida, like insects, are organised to live in and breathe air; but they are distinguished at first sight by the general form of the body and the number of their legs, and by some important modifications of their internal structure. The head is always, in the Arachnida, confounded with the thorax, and is deprived of antennæ, or at least of homologous parts exclusively employed in sensation. They have four pairs of legs. Some of the species respire by pulmonary sacs only; in others, these are associated with ramified tracheæ, and the smaller Arachnidans breathe, like insects, by tracheæ exclusively. The dorsal vessel and a circulating system exist in all; the heart presents a more compact and muscular form in the pulmonary Arachnidans.

The integument is chitinous, as in insects, but presents the same variations in density, in different species, as in the winged Articulata. In the scorpions, it is as dense and inextensible as in the Coleoptera: in the spiders and mites it is generally softer than in insects, especially that of the abdomen.

The body is divided into two principal parts, of which the anterior is called the "cephalothorax," because it answers to the two first segments of insects in a confluent state; the second and larger division is called the "abdomen;" it is generally larger and wider than the first, from which it is divided by a deep constriction; but in scorpions it forms, as in Crustaceans, a slender continuation of the thorax, a kind of caudal appendage divided into many joints. The organs of locomotion are all attached to the cephalothorax, and consist of eight legs, presenting different grades of development in the different forms of the class, but, in most, being very similar to those of insects, and almost always terminated by two hooks.

We are led by a close series of gradations in the present class to species presenting a higher and more concentrated type of the heart and the respiratory system than any of the true insects attain to; but, perhaps, the more decisive mark of the superiority of the Arachnida is recognised in the study of their development. They not merely do not undergo metamorphoses in the sense in which the term is usually understood in insects, viz., by the exercise of active life during an early stage of development; but they do not pass through the same series of inferior articulate forms in the course of their uninterrupted development. The Arachnida are amongst the few animals of their grade of organization that are built up at once according to their family pattern. Before even the germ-mass has been covered by the colliquamentum or embryonal skin, the characteristic cephalothorax and abdomen have been sketched out. The Arachnida must not, however, be supposed to stand, as a whole, superior to the insecta; organization does not march in and by them directly from the winged Articulata; they are rather a collateral or diverging branch, which springs from a very low point; so low a one, that some have mistaken these protarachnidans for entozoa.

The microscopic parasite of the sebaceous sacs and hair-follicles of the human skin, discovered by Dr. Simon, of Berlin, and described in "Müller's Archiv. fur Physiologie*," represents the lowest organised form of the class Arachnida, and, like the parasitic Cymothoe and Bopyrus of the Crustaceous class, makes a transition from the Anellides to the higher articulata. In length it ranges from 1-50th to 1-100th of an inch. In this microscope you will see after the lecture, a magnified view of the human hair-follicle, containing the bulb of the hair, the appended sebaceous sac, and the duct containing the parasitic Arachnidan in question. That this parasite ranks with the Arachnida, and not with the red-blooded or any of the lower organised worms, is evident from the division of the body into thorax and abdomen, from the structure of the head and mouth, which are confluent with the thorax, and from the undivided abdomen. The thoracic appendages, eight in number, as in the Arachnida, are, however, of the simplest and most rudimental kind, and are terminated by three short setæ; the Anellidous type of the locomotive appendages being still retained. The integument of the abdomen is very minutely annulated. The mouth is a suctorial one, or proboscidiform, consisting of two small spine-shaped maxillæ, and an extensile labium, capable of being elongated and retracted; it is provided on each side with a short and thick maxillary palp, consisting of two joints, and with a narrow triangular labrum above. Although the structure of the mouth, as described and figured by Dr. Simon, has much analogy with that of the *Acari*, like which, also, the follicular parasite in one of its stages of development is a hexapod, yet it differs from the *Acari*, and from all other *Holeteræ* of Dugés, in the articulations of the thorax; whilst it equally differs from the *Pseudo-scorpionidæ*, and the *Pycnogonidæ*, which have the thorax articulated, in the rudimental form of the feet, and the structure of the trophi.

It can hardly be supposed, that the changes of form indicated by the figures 8, 1, and 2 of Dr. Simon's memoir can be acquired without ecdysis; but such a metamorphosis, with the natural divisions of the body, and the structure of the oral and thoracic appendages, indubitably raise the parasite of the hair-follicle above the Entozoa, to which class Prof. Erichson, in Dr. Simon's Memoir, has correctly stated that the present parasite cannot belong. For the reasons above given, I cannot assent to the place which that accomplished naturalist has assigned to the Arachnidan in question among the *Acaridæ*, much less to the genus *Acarus*. Of the generic distinction of the parasite there can be no doubt, and I have therefore proposed to call it *Demodex folliculorum*, from δημος, lard, and δηξ, the name of a boring worm, indicative of the habitat and vermiform figure of this parasitic arachnidan, which insinuates itself into the hair-follicles and the sebaceous glands that communicate therewith.

In some of the small and parasitic tracheary Arachnida, or mites, certain pairs of legs are terminated by adhesive suckers, and others are occasionally terminated by setæ, as in the itch-mite (*Sarcoptes Galei.*)

The mouth, in all Arachnidans, is situated on the anterior segment, and is provided with instruments adapted either for suction or mastication. In the parasitic mites the rudiments of the jaws are more or less enveloped in a sheath formed by the lower lip: the maxillary palpi are usually the only parts which have free and independent movements, and their extremity is commonly armed either with a hook or with a pair of small nippers.

In spiders the mandibles are situated at the front of the head, and are terminated by a moveable and very sharp hook, which is pierced at its extremity by a small fissure, serving to give issue to the poison secreted by a gland lodged in the preceding joint. The maxillæ are two in number, and the labium situated between these organs is composed of a single piece. The maxillary palpi, compared with those of insects, are of great length and size, and resemble the thoracic feet, which, in the Mygale, they nearly equal in length. In female spiders they are terminated by a single moveable claw: in the males the last joint is dilated, and presents a more complicated structure. In the scorpion the mandibles are short and terminate in a pair of strong pincers; the maxillary palpi are proportionally more developed than in the spiders, and, like the mandibles, they terminate by pincers, which, are so strong and large in the great scorpion (*Buthus Africanus*), as to resemble the chelæ of the Crustacea, and more especially as they are succeeded by four pairs of simple and smaller thoracic legs.

In the genus *Galeodes* the mandibles are chelate, but much longer and larger than in the scorpions. The maxillary palpi resemble small slender feet, but without the terminal hooks; and the succeeding pair of legs being similarly modified, only six ambulatory feet of the ordinary structure remain. Two rudiments of antennæ have been noticed attached to the mandibles in certain species of this genus. The head is likewise more distinct from the thorax, and it supports the first of the four pairs of legs usually ascribed to the Arachnida. These modifications, with the union of the ocelli into two groupes, indicate the Galeodes to form the passage to the Hexapod insects.

The modified form of the pair of legs which succeeds the maxillary palpi in the *Galeodes*, indicate their homology with the labial palpi in insects, and their connexions demonstrate them to be those organs, although modified for a different function in the present class. The connexions, also, of what are called "mandibles" in spiders, and "chelæ" in scorpions, and especially the origin of the nerves of those parts from the brain or supra-œsophageal ganglian demonstrate them to be modified antennæ, which are analogous, in the spider, to the poison-fangs of the rattlesnake or viper, and in the scorpions, to the pincers of the crab and lobster.

Before entering upon the description of the generative organs in the typical forms of the *Arachnida*, I am led to offer a few remarks on another low organised arachnidan, which, on account of its remarkable power of retaining life, and reviving after some years complete desiccation, has received the generic name of *Macrobiotus*. This minute and peculiarly shaped mite, in which the hinder rudimental legs come off from the abdomen, was discovered by Eichhorn in 1767, and was described by him under the name of "water-bear," (wasser-baer.) Corti, in 1774, recounted its power of returning to life after being dried. It is not uncommonly found in the gutters of the roofs of continental houses; it crawls along the sediment like a tortoise, and was grouped by Spalanzani with the Rotifers, under the name of "tardigrade." Otho Fred. Müller first detected its true relationship with the mites. It is subject to many moults and oviposits in its exuviæ.

The *Macrobiotus* is androgynous, and the only known arachnidan that is so. The testes are two long fusiform sacs, situated one on each side of the single ovarium and of the intestine; they communicate with a median dorsal vesicula seminalis, in which Doyère and Dujardin have detected actively moving spermatozoa. The ovarium is a large sac,

* 1842, p. 218, pl. xi.

with loose and dilatable tunics, situated dorsad of the intestine and advancing, when gravid with ova, as far forwards as the first segment of the trunk. A short oviduct opens at the fore part of the cloaca, which is on the ventral aspect of the penultimate segment. The ovarian sac is sustained by two suspensory ligaments or muscles, which diverge to be attached, above the gastric division of the alimentary canal, to the internal dorsal muscle of the second segment. The ova, which are usually five or six, rarely more than ten in number, are simultaneously developed, and of large proportional size. The clear germinal vesicle is imbedded in a coloured yolk, enclosed in a membrana vitelli. The chorion is smooth when oviposition and moulting go on together, and the cast skin receives the eggs; at other times the chorion is beset with points or tubercles. The germ-mass is transformed at once into the Macrobiotus; the young animal moves on the twentieth day, and is excluded on the twenty-fourth, unless it happens to become dried; when the young becomes torpid like the parent, and both revive when they are re-moistened. It is about one-fourth the size of the parent.

All the Arachnidans of the mite family are remarkable for their power of resisting lethal influences, and for the retention of their vitality when torpid and apparently dead. The ova of such are, with still greater difficulty, deprived of their latent life. As all the mites have been endowed with well-developed, if not complex, generative organs, the requisite proof must be satisfactorily afforded of the impossibility of the existence of the eggs of mites in, or of the access of such to, fluids traversed by galvanic currents, before credence can be reasonably given to the statements that acari can have been developed by such agency, without any pre-existing egg, *i. e.*, by way of the "*generatio spontanea seu equivoca.*"

In the genius *Trombidium*, the species are, as in other true mites, represented by distinct males and females; the testes form one compact mass, consisting of a groupe of red-coloured sperm-sacs, attached by a short stem to an annular vas deferens, which opens between the hindmost pair of legs, but receives before its termination the ducts of two vesiculæ seminales. In the female the ovarium is large and apparently single, but from it there proceed two oviducts. Mites are oviparous; and, a few days ago, Mr. Rainey was so obliging as to show me the eggs of the *Acarus* or *Sarcoptes Galei*, which he had discovered beneath the epithelium, in an itch patient at Guy's Hospital.

In the true spiders (*Araneidæ*) the males are characterised by their smaller size, their longer limbs, and brighter colours, as compared with the females; but more decisively by the tumid and unarmed termination of the long maxillary palpi; the parts analogous to "vesiculæ seminales" being lodged here. The essential and the accessory generative organs of this sex are quite distinct and remote from each other: the principle of such separation, which is exemplified in the relation of the Fallopian tube to the ovarium in Mammalia, is carried to an extreme in regard to the vesicula seminalis and testis in the spiders. If the analogy of the female parts be here, as in other animals, a guide in the determination of the essential organs of the male, the testes ought to be the two long vermicular tubes, applied to the under wall of the abdomen, which commence posteriorly, either by a simple sac, as in the Mygale, or by an oblong vesicle, as in the genius *Pholcus*, the ducts of both of which terminate anteriorly by two approximate orifices, or else by a common opening, situated between the two pulmonary stigmata. These abdominal testicular sacculi are, in fact, laden at the breeding season with sperm-cells and their characteristic nuclei or "spermatoa," from which the spermatozoa are afterwards developed.

The second or copulatory part of the generative organs is confined to the two last joints of the maxillary palp; the dilatation of these joints is chiefly formed by a spoon-shaped membranous tube or sac, commencing at the penultimate and reaching its greatest expansion at the last joint: this tube appears to line a cavity in the ordinary state; but it can be distended, everted, and erected, when it is seen to be terminated by a horny appendage. In this sac the spermatozoa are found both free, and in the interior of the sperm-cells, having escaped from the spermatoa into the cavity of the parent sperm-cell.

In the female spider the ovarium sometimes presents the form of a simple elongated fusiform vesicle, closed at one extremity and communicating with a slender oviduct at the other, which duct, after more or fewer convolutions, terminates at the corresponding angle of the simple transverse vulva. It is situated, like the outlets of the vasa deferentia, between the pulmonary stigmata. Each ovarium is divided in the Epeira, or diadem-spider, by a transverse septum, and the eggs are laid at two distinct periods. In the common house spider the ovisacs are developed, like grapes, from a central stem-like ligament, to which they are appended by slender peduncles, the whole being inclosed in the common capsule.

The most careful observations, repeated by the most attentive and experienced entomologists, have led to the conviction that the ova are fertilised by the alternate introduction into the vulva of the appendages of the two palpi of the male. Treviranus's supposition that these acts are merely preliminary stimuli, has received no confirmation, and is rejected by Dugés, Westwood, and Blackwall; and with good reason, as the detection of the spermatozoa in the palpal vesicles has shown. At the same time, the most minute and careful research has failed to detect any continuation of the vas deferens into the terminal erectile sac of the palp, or any other termination than the abdominal opening above described. Dugés offers the very probable suggestion that the male himself may apply the dilated cavities of the palpi to the abdominal aperture, and receive from the vasa deferentia the fertilising fluid, preparatory to the union; and the discovery of the spermatozoa at an earlier stage of development in the abdominal testes, which development is completed after the transference of the semen to the vesiculæ, equally demonstrates the respective shares which the two widely separated parts of the male apparatus perform in these remarkable articulata. The analogy of the separate location of the testes and vesiculæ seminales in the dragon-fly will no doubt present itself to the mind. Certain it is that an explanation of this singular condition of the male apparatus, in which the intromittent organ is transferred to the remote and outstretched palp, is afforded by the insatiable proneness to slay and devour in the females of these most predacious of articulated animals.

The young and inexperienced male, always the smallest and weakest of the sexes, has been known to fall a victim, and pay the forfeit of his life for his too incautious approaches. The more practised suitor advances with many precautions, carefully feels about with his long legs; his outstretched palpi being much agitated; he indicates his approach by vibrating the outer border of the web of the female, who answers the signal, and indicates acquiescence by raising her fore-feet from the web, when the male rapidly advances; his palpi are extended to their utmost, and a drop of clear liquid ejected from the tip of each clavate end, where it remains attached, the tips themselves immediately coming in contact with a transverse fleshy kind of teat or tubercle protruded by the female from the base of the under side of the abdomen. After consummation, the male is sometimes obliged to save himself by a precipitate retreat: for the ordinary savage instincts of the female, "etiam in amoribus sæva," are apt to return, and she has been known to sacrifice and devour her too long tarrying or dallying spouse.

There is a redeeming feature, however, in the psychical character of the female spider, in the devotion with which she fulfils all the duties of the mother. But before proceeding with the examples of the maternal instinct, I shall first point out the anatomical character of the generative organs in the scorpion.

The palpi of the scorpion take no share in the formation of the generative system in either sex; both male and female are provided with a pair of peculiar comb-like appendages, attached directly behind the genital aperture, which is situated at the middle line of the under and posterior part of the abdomen. Müller has observed, that the teeth in the comb of the male scorpion (*Buthus Africanus*) are much more numerous and smaller than those in the female; but the sexes are not otherwise distinguishable outwardly. The males appear to be fewer in number than the females.

The testis of the scorpion is a long and slender tubulus, which divides, and the divisions anastomose together to form three loops or meshes. A short blind sac (*Vesicula glandularis*) communicates with the termination of the tubulus, and the common duct terminates in an oblong receptacle, the outlet of which is situated close to the corresponding one on the opposite side of the body, at the middle of the under part of the last segment of the thorax.

The tubular oviduct of the female scorpion divides and unites with its fellow through the medium of a third shorter middle canal, forming three meshes on each side, and a seventh longer anterior loop by the terminal union of the oviducts before they open upon the bivalvular vulva.

The ovaria consist of lateral appendages going off at right angles from the longitudinal canals, and expanding into elliptical sacculi before communicating with the canals; the ova are developed in the slender blind free extremities or beginnings of the ovaria, and the embryo is developed in the sacculus, the scorpion being viviparous. The course of its development, which would be a subject of great interest, has not yet been traced. In the separate outlets of the sperm-ducts in the male, and of the oviducts in the female, the higher *Arachnida* manifest an analogy with the Crustacea.

All spiders are oviparous. The mother prepares a soft and warm nest for the eggs, which she guards with great care. The *Lycosa vagabunda* carries her cocoon about with her; if it be removed and a ball of cotton substituted, she has been known to bestow upon it the same care; but when the cocoon was offered together with the cotton ball, she seldom failed to select her own fabrication. The *Saltica* selects an empty snail shell for her cocoon, and spins a silken operculum across the mouth. The *Epeira fasciata* encloses her eggs, which are as big as millet-seed, in a papyraceous cell, surrounded by a cottony covering, which she then suspends by a dozen threads or pillars to a larger chamber of silk. The whole is attached to a branch of a high tree, and is guarded by the mother, who quits it only in extreme danger, and returns when this is past.

Bonnet, finding in his garden the pit-fall of the larva of the ant-lion, took a spider with her cocoon, and threw them in; the spider crawled up the side of the pit, but before she could escape the ant-lion seized the cocoon and tore it from the female; she returned and seized it, and a battle of some minutes ensued. The ant-lion, however, succeeded in mastering the spider and retaining the cocoon. Bonnet then rescued the mother and placed her at the margin of the pit, but she refused to abandon her offspring, and remained there, passive, as if she had lost everything that was worth living for.

Prior to impregnation the ovum consists of a yolk and delicate yolk-membrane, containing a large germinal vesicle, whose nucleus shows several nucleoli, and, besides this, a peculiar firm corpuscle, discovered by Siebold and Von Wittich, usually consisting of fine concentric layers, more seldom granulated, and disappearing in the fully developed ova.

The ovum of the spider, at its exclusion, consists of a large and finely granular vitellus, invested by the membrana vitelli, which is separated from the chorion by a very thin structure of colourless liquid, analogous to the albumen or the white of the hen's egg. The yolk is generally of a yellow colour; but in some species of spider is grey, white, or yellowish brown. The germinal vesicle has disappeared. An opaque white elliptical spot indicates, at this period, the metamorphosed and impregnated centre from which subsequent development radiates. The previous changes which have led to this condition of the excluded ovum have been ascertained to be due to the attraction and assimilation by the primary germ-cell and its progeny of a small proportion of the yolk, which is thus seen to consist of a germ-yolk and a food-yolk. The subsequent processes, up to the complete formation of the young spider, have been described and figured by the accurate and industrious Herold.

The germ-mass consists of derivative germ-cells like minute opaque whitish granules, of smaller diameter than those of the vitellus; in some species Herold observed what he believed to be several germ spots on different parts of the superficies of the yolk, which rapidly coalesced into one body. Development commences by expansion of the circumference of the germ-mass, which, as it expands, covers the yolk with a semi-transparent thin layer, the basis of the future integument. Herold next describes the granules of the germ-mass as being decomposed into almost imperceptible molecules, in which we may recognise the ordinary result of the fissiparous property of its constituent nucleated cells; their powers of assimilation are at the same time manifested by the changes which they effect in the albumen, at the expense of which they seem, in the first instance, to increase their numbers, and diffuse themselves over the surface of the vitellus. This covering of the yolk Herold calls "colliquamentum." He observes, that the original position of the germ-spot is indicated by a clear, transparent point (hyaline?); that this point becomes thickened, pearly, and opaque, so as to conceal the subjacent vitelline cells. A similar change progressively extends over the colliquamentum; and, when one-fourth of the circumference of the yolk is thus covered, the opaque layer has taken on a definite form, resembling the figure 8, the smaller and anterior division being the base of the future head, the posterior and larger one, of the thorax. A fissure is next observed to divide the cephalic from the thoracic portion, the two parts being distinct at this period, and determining the essential nature of the first great segment of the body in the mature spider. The margins of the thorax are next seen to be subdivided on each side by three parallel fissures into four segments; these are the bases of the epimeral pieces. The part of the opaque integument which connects the two series below is the rudimental sternum. A second constriction begins to divide the thorax from the abdomen; the mandibles or antennæ begin to bud forth as two convex processes from the anterior part of the head; the part intervening between these and the epimeral pieces forms the rudiment of the maxillæ. The intermediate labium also begins to be defined from the sternum. The opaque peripheral layer, extending from the thorax to the opposite end of the ovum, lays the foundation of the ventral integument of the abdomen. Upon the opaque integument, which is extending backwards over the dorsal part of the head, the characteristic groupe of simple eyes begins at this time to be distinctly developed, and the rudiments of the maxillary palps and of the four pairs of thoracic legs become recognizable; now, also, the dorsal vessel appears along the upper curvature of the abdomen, and thus all the chief characteristics of the future spider are manifested, whilst the great mass of the vitellus remains still visible through the transparent and incomplete lateral and dorsal parts of the integument.

The constriction between the two divisions of the body increases; the legs and palpi next present slight traces of articulations; as they increase in length they cross the middle line of the sternum and interlock with those of the opposite side. The mouth, the vent, and the wide alimentary canal are formed; the integument is completed, as in other *Articulata*, by a dorsal cicatrix, and in this state the young spider breaks through the attenuated chorion. The jaw-shaped antennæ, the cephalo-thorax, and abdomen, are first extricated, and afterwards, but with more difficulty, the palpi and legs are withdrawn. A similar process has soon to be repeated in the casting off the fœtal integument, which becomes too small for the rapid growth of the young spider. This first moult always takes place in the silken nest of the parent; the young spider then issues forth, and is subject to repeated moults before acquiring the mature size. We perceive, therefore, that throughout the whole process of the development of a spider, there is nothing worthy to be called a metamorphosis. The highest of the Articulata never acquires the condition of the apodal and acephalous worm; the rudiments of the head, with its eye-specks, and of the limbs, are manifested before the vitelline mass is included by the abdominal walls or intestinal membrane: in fact, with the first indications of the characteristic ocelli, trophi, and legs, the cephalothorax and the abdomen are distinctly sketched out, and the special arachnidal form is acquired.

The regeneration of the legs of the spider follows precisely the same law as that which regulates their reproduction in the Crustacea. If the limb be injured at the tarsus, tibia, or femur, it must first be cast off at the coxo-femoral joint, before the process of reproduction can commence, and this must be preceded by a moulting of the integument; the new leg being at first of small size, but with all its joints and appendages, and acquiring the full proportions at the second moult.

The subject of the present Lecture would not be quite completed if I were not to add a few words on the organs for the secretion of the material of the nest of the spider—a silken material which is used, however, for many other important purposes in the economy of these insects, in the fabrication of their abode, of their nuptial chamber, of their trap for catching, and their cords for binding a living and struggling prey. The organs which secrete the material in question, are lodged in the posterior part of the abdomen, and in the *Epeira fasciata*, which is remarkable for the large size of its web, they occupy, when in full activity, about one-fourth of the abdominal cavity. They present the form either of slender and more or less branched tubes, or of dilated sacs, the excretory ducts of which terminate upon projecting jointed organs at the posterior extremity of the abdomen, called spinnarets.

In the *Clubione atrox*, the glands consist of four larger and numerous small tubes: two of the larger branched tubes are twice the size of the other pair. In the genus *Pholcus* the organ is reduced to a more simple condition; it consists of six vesicles of different shapes and sizes; two are large and elongated; they occupy the middle of the under part of the abdomen, and their slender ducts are continued in a tortuous course to the spinnarets; two others are also elongated, but are smaller than the preceding; the remaining two are spherical. The duct of each of these glands terminates upon its appropriate spinnaret, and there are consequently six of these organs.

The *Mygale avicularia* has only four spinnarets, and in the *Mygale cementaria* two of them are imperforate. Six, however, is the ordinary number of spinnarets in the spiders, two of which are longer than the others. The secretion does not issue by a simple outlet, but by a multitude of microscopic pores, which, in the shorter pairs of spinnarets, are prolonged from the terminal surface upon minute processes. If you throw a little dust upon the web of any of the orbitele spiders, of the *Epeira diadema*, for example, you may observe that it adheres to the spiral, but not to the radiated threads. Lyonnet supposed that the adhesive threads issued from tubes, and the others from sessile orifices. The secretion is a glutinous fluid, insoluble in water, and which quickly dries in air; some species, as the *Argyroneta aquatica*, spread their nets habitually under water.

The degree and mode in which spiders exercise this singular secreting faculty varies considerably in the different species. Some, as the *Clubiones*, line with silk a conical or cylindrical retreat, formed, perhaps, of a coiled-up leaf, and having an outlet at both extremities, from one of which may issue threads, to entrap their prey. Others, as the *Segestriæ*, fabricate a silken burrow of five or six inches in length, in the cleft of an old wall. The *Mygale cementaria* lines a subterraneous burrow with the same substance, and manufactures a close-fitting trap-door of cemented earth lined with silk, and so attached to the entry of the burrow as to fall down and cover it by its own weight, and which the inmate can keep close shut by means of strong attached threads.

The arrangement of spiders by M. Walcknaër into families, characterised by their habits, places the principal varieties of their webs in a very concise point of view.

The *Cursores*, *Saltatores*, and *Laterigradæ*, make no webs; the first catch their prey by swift pursuit, the second spring upon their prey by insidious and agile leaps; the third run, crab-like, sideways or backwards, and occasionally throw out adhesive threads to entrap their prey. The *Latebricolæ* hide in burrows and fissures, which they line with a web. The *Tubicolæ* inclose themselves in a silken tube, strengthened externally by leaves or other foreign substances. The *Niditelæ* weave a nest, whence issue threads to entrap their prey. The *Filitelæ* are remarkable for the long threads of silk which they spread about in the places where they prowl in quest of prey. The *Tapitelæ* spin great webs of a close texture like hammocks, and wait for the insects that may be entangled therein. The *Orbitelæ* spread abroad webs of a regular and open texture, either circular or spiral, and remain in the middle, or on one side, in readiness to spring upon an entangled insect. The *Retitelæ* spin webs of an open meshwork, and of an irregular form, and remain in the middle or on one side, to seize their prey. Lastly, the *Aquitelæ* spread their silken filaments under water to entrap aquatic insects.

The silken secretion of spiders is not applied only to the formation of a warm and comfortable dwelling for themselves, or of a trap for their prey; it is often employed to master the struggles of a resisting insect, which is bound round by an extemporary filament, spun for the occasion, as by a strong cord. Lastly, a softer and more silken kind of web is prepared for the purpose of receiving the eggs, and to serve as a nest for the young.

ORIGINAL CONTRIBUTIONS.

TYPHUS FEVER, TYPHOID FEVER, RELAPSING FEVER, AND FEBRICULA,

THE DISEASES COMMONLY CONFOUNDED UNDER THE TERM

CONTINUED FEVER.

ILLUSTRATED BY CASES COLLECTED AT THE BED-SIDE.

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(Continued from page 137.)

CASES ILLUSTRATIVE OF THE SYMPTOMS AND LESION GENERALLY AS OBSERVED IN TYPHOID FEVER.

Case 23.—Without known cause—frontal headache—Pain in the abdomen—vertigo—debility—dry red tongue—diarrhœa—heaviness of expression—somnolence—delirium—flushing of cheeks—sonorous râle—rose spots—symptoms of laryngitis—*death* on the thirty-third day.

Forty-one and half hours after death—ulcers of the pharynx—extensive ulceration of Peyer's patches—enlargement of the mesenteric glands—redness and thickening of lining membrane of larynx—imperfect consolidation of posterior part of left lung—redness and softening of mucous membrane of bronchial tubes.

Jane T., aged 32, a servant in a public-house, was admitted into the London Fever Hospital, under the care of Dr. Tweedie, Nov. 11th, 1847. She had resided in London about four or five years; had never suffered want of food or clothing; unmarried, but the mother of two children. She was of temperate habits; her previous health had been excellent.

On Sunday, Oct. 31st, she suffered from headache and pain in the abdomen, followed the next day by pains in the limbs and back. On Monday night she had rigors, which were repeated the three or four succeeding nights. At this time the bowels were regular, and they continued so till the 6th November, when, without having taken any aperient medicine, they became much relaxed. For the first two or three days of her illness she suffered from vertigo. During the course of her illness she has had a sense of unpleasant taste and smell, and nausea, but no vomiting, and no epistaxis. Quited her work Oct. 31st, but did not take to her bed till the 3rd of Nov.

The following notes of her condition were made Nov. 12th, *i. e.*, the 13th day of disease. She slept but little last night; intellect unaffected; the expression natural; a little frontal headache; vertigo in the erect position; slight singing in the ears; she is able to leave her bed unassisted, but with difficulty; she complains of pain in the back; the tongue is slightly furred—dry, smooth, and red; she has passed during the last twenty-four hours

one scanty stool. There is no appetite, but much thirst; she complains spontaneously of pain in the abdomen, which is full and resonant. There is some tenderness on firm pressure in the right iliac fossa. The pulse is 120; there is no cough, with the exception of a little sonorous râle on deep inspiration; the chest signs are normal. The skin is warm and dry. A few—about twenty—slightly elevated rose-coloured circular spots, which disappear under pressure, are seen on the abdomen and thorax. There are no sudamina.

She died on the 33rd day of disease. The following changes in her condition were noted between the 12th and 33rd days.

The pulse 120 on the 12th day, fell on the 13th to 100, rose again to 120 on the 14th day, was 100 only on the 15th day, 110 on the 17th day, but only 96 on the 19th. It again rose to 120 on the 21st day. From the 22nd to the 30th it ranged between 126 and 130. On the 30th, however, it reach 160, which rate it maintained till her death.

The tongue became moist and clean two days after admission; *i. e.*, on the 14th day of disease, and continued so till the 17th day, when it became dry and fissured in the centre; at the same time it continued clean. On the 21st it became dry over its whole surface, and at the same time was covered with a pale yellow fur, cracked across at various parts; this fur commenced to separate on the 23rd day in large scales; the cracks in it communicating, and the edges of the scales curling up. On the following day the yellow fur assumed a brownish hue, which continued without change till death. Sordes appeared on the teeth for the first time, on the 30th day.

The little tenderness of the abdomen observed on her admission disappeared the following day, and neither pain, tenderness, gurgling, fulness, nor resonance were observed from the 12th day till her death. At the same time the stools continued relaxed; *i. e.*, of thin pulpy consistence. On the 24th and 30th days they were absolutely watery; on the 25th and 29th days she had no stool; with these exceptions their number varied from two to three daily.

Some heaviness of expression was observed on 19th, and it had increased considerably by the 24th day; at the latter date, too, somnolence commenced, and she was noted to doze much night and day. This condition continued till the 29th day, when she slept less, and on the 30th was decidedly more wakeful; on the 31st the somnolence had disappeared. There was no delirium till the erysipelatous redness of the nose showed itself on the last day of life.

Deafness was first observed on the 22nd day of disease; it became more marked on the 24th day, and continued till death. The general strength was markedly impaired, yet she continued to leave her bed without the aid of a nurse; *i. e.*, to assist herself on to the close stool till the 24th day of disease; but, from the 24th till her death she was quite unable, although even on the 31st she supported herself in bed without support, when raised by the nurse. On the 30th and 33rd days she passed one stool into bed, apparently unconscious of the act.

Flushing of the cheeks was frequently observed, but was not constantly present.

The cough trifling on the 19th day; was much more troublesome on the 30th day; it continued till her death. The sonorous râle remained with little change; but, on the 29th, subcrepitant râle was heard over the posterior part of the chest. There was no dulness.

The spots observed on admission were very pale on the 15th day of disease; at the same time, a few fresh were noted to be present. These, too, were paler on the 17th day; and, on the 21st day, all those previously observed had disappeared, but three or four fresh spots, of the same character as those first described, were marked. These spots, also, had nearly disappeared on the 23rd. No fresh had made their appearance on the 24th day. I failed to make any further note with reference to the presence or absence of spots. The skin was dry from the outset, and no miliary vesicles were observed.

On the 31st day, she complained, for the first time, of sore throat; the velum pendulum palati and tonsils were red, dry, and slightly swollen.

The following notes of her condition were made on the 33rd day of disease, about 2 p.m.—She passed a very restless night, wanting to leave her bed while delirious. Her mind is now wandering a little. The cheeks are free from flush. There is a faint red erysipelatous blush covering the nose and upper lip. The redness is somewhat darker over the lower than the upper half of the nose. She swallows with difficulty. She has lost her voice. The breathing is tracheal. There is slight tenderness on pressure over the upper part of the larynx. On listening over the trachea, the inspiratory sound is short and harsh; expiratory, prolonged and snoring. A little mucous râle is heard over both sides of the chest anteriorly.

She swallows with some difficulty; the tongue is dry and brown; she has passed two stools, one of them in bed; the expression of prostration is much more marked than before; she is unable to support herself in the least degree in bed.

She died at 9 p.m., without a struggle.

The treatment, at the first, was simply expectant. On the 21st day a blister was applied to the chest. On the 24th, 6 ounces of white wine were ordered. The quantity of wine was increased to 8 ounces on the 32nd day. At the same date a blister was applied to the side of the neck, and calomel and opium pills administered every three hours.

The body of J. S. was examined 41½ hours after death, and the following appearances noted:—

Cadaveric rigidity was well-marked in all the joints; a moderate amount of fat on the surface. The spots marked during life had left no trace of their existence.

Head.—The larger vessels of the pia mater were slightly congested; a little transparent colourless serosity was found in the cavity of the arachnoid. There was also a little similar fluid in the meshes of the pia mater, by which the arachnoid was slightly elevated over the anfractuosities; it was not raised from the surface of the convolutions. There was no opacity of the arachnoid. The pia mater separated with normal facility from the surface of the brain. About 6 drachms of serosity escaped from the ventricles. The consistence and colour of the cerebral substance was healthy.

The lining membrane of the *pharynx* was congested, and covered with thick muco-purulent matter. The mucous membrane covering the uvula was destroyed by an ulcer, which extended up the posterior surface of the velum pendulum palati for about two lines. It was about four or five lines in breadth in the latter situation; the edges of the ulcer were bright red; its floor, formed of submucous cellular tissues, was dull red; the edges of the ulcer were not thickened; it was quite superficial. A similar but smaller ulcer was seated on the hard palati.

Larynx.—The arytæno-epiglottidian folds were considerably thickened; a large mass of tough mucus filled the opening into the larynx; the rima glottidis was very narrow, in consequence of thickening of the chordæ vocales. The whole mucous membrane of the larynx was congested, and covered with purulent looking fluid.

The *bronchial tubes* of both lungs were nearly filled with muco-purulent fluid. The mucous membrane of the larger tubes was minutely injected and soft, being readily removeable by slight scraping. The minute tubes were filled with purulent-looking fluid, which issued from the cut surface of the lung in drops.

Lungs.—There was no fluid in either pleura. The left lung was free. A few firm adhesions united the posterior inferior part of the left lung to the costal pleura.

Right lung weighed 15½ ounces. It was crepitant throughout, but felt more solid posteriorly than anteriorly. The posterior part of the lung was of a deep dirty red colour. Portion cut from any part of the lung floated in water.

Left lung weighed 15½ ounces. The most depending part was of a deep violet colour, felt more solid than natural, contained but little air, broke down rather too readily on pressure, and after firm pressure sank in water.

The *pericardium* contained 1 ounce of yellow serosity. It was healthy in all respects.

The *heart* weighed 8 ounces. Its substance and valves were healthy. The right auricle and ventricle contained a large firm yellow fibrinous clot continuous with a similar clot in the pulmonary artery. In the left auricle and ventricle there was a smaller similar clot extending into the aorta.

The *mesentery* was loaded with fat.

The *mesenteric glands* appeared numerous; they were about the size of peas, of a reddish colour, and soft.

On the peritoneal surface of the lower part of the ileum were several oval patches of a purplish colour from minute injection. The small intestines were moderately distended with flatus. There was a little fæculent matter in the large and small intestines.

The *œsophagus*, the *stomach*, *duodenum*, and *jejunum* were carefully examined, and appeared healthy.

Ileum.—About three feet above the ileo-cœcal valve was one of Peyer's patches, finely injected, but scarcely thicker than natural; on its upper part was an ulcer, one line in diameter, its floor formed of sub-mucous cellular tissue; its edges not elevated. About six inches below the above described patch, was a circular ulcer, about three lines in diameter, the margin of which was considerably thickened; its floor was formed of sub-mucous tissue. From this ulcer to the ileo-cœcal valve, every Peyer's patch was more or less destroyed by ulceration. Some of the ulcers were circular, some oval, others irregularly oval. On some of the patches were two ulcers, separated by a narrow slip of undestroyed mucous membrane. There was no thickening of any of the patches. The floors of a majority of the ulcers were formed by the exposed and slightly enlarged transverse muscular fibres of a deep red colour. The margins of the ulcers were of a deep grey colour. Their diameters varied from three lines to one inch. Immediately above the ileo-cœcal valve the mucous membrane of the whole circumference of the intestine was more or less completely destroyed, here and there the ulcerated surface being divided or partially divided by narrow lines of mucous membrane of a deep grey colour. At some places the floor of this large ulcer was formed by transverse muscular fibres, at others, of the sub-mucous tissue.

The mucous membrane of the ileum, between the ulcerated agminated glands, was healthy in colour, consistence, and thickness.

The patches of injection, described as seen on the peritoneal surface of the small intestines, were found to correspond to the ulcerated Peyer's patches.

The *large intestines* were healthy in colour and consistence.

The *pancreas* was natural in appearance.

The liver.—The branches of the vena portæ and vena hepatica contained much dark fluid blood. The division between the lobules was indistinctly marked. There was some faint yellowish mottling of the surface and substance.

The fracture and consistence was normal.

The *gall bladder* contained 1½ ounces of rather pale yellowish bile. Its lining membrane was healthy.

The *spleen* measured 4½ inches by 3; *i. e.*, it was small. Its external surface was corrugated. It was normal in colour and consistence.

The kidneys, uterus, and urinary bladder appeared in every respect healthy.

Case 24.—Without known cause—debility—diarrhœa—noisy delirium—pink flush of the cheeks—rose spots—cough—sonorous râle—rapid pulse—great difficulty in swallowing—tension, resonance, and tenderness of abdomen—dry brown tongue—extreme prostration—*death* on about the 23rd day. Twenty-two hours after death: Loss of cadaveric rigidity—ulceration of pharynx—extensive ulceration of Peyer's patches—enlargement and softening of the mesenteric gland—enlargement of the spleen—recent adhesion of pleura—non-granular lobular pneumonia.

Fanny P., aged 16, a stout, fair, brown-haired girl, a domestic servant, was admitted into the London Fever Hospital, under the care of Dr. Tweedie, Nov. 27th, 1848.

Her previous health was said to have been very good. She was in a situation, and not in want of any of the necessaries of life. She was born in London.

The following history only of her present illness could be obtained. She left her situation on the 16th November, and took to her bed the same day. Her bowels were said to have been confined till after she had aperient medicine, but this was doubtful. For a night or two preceding her admission she had been delirious, and had complained about as long of her throat. She appeared to those around her to have some difficulty in swallowing. Epistaxis, to a slight amount, took place directly after her entrance into the hospital. On the day after her admission the following notes were made:—

Nov. 28th, *i. e.*, 13th day after taking to bed.—She had no sleep till towards morning, and then very little. She was very noisy, frequently attempting to leave her bed, but unable. Mind very dull. Memory defective. Knows where she is, but has no idea how long she has been in the Hospital. The expression of face is somewhat heavy; the complexion is clear the right cheek is flushed, of a pink colour; the conjunctivæ slightly injected; the pupils natural. There is no headache.

She can lie in any position, but moves heavily and slowly, and is quite unable to leave her bed unaided by the nurse. The muscular movements are very unsteady; there is an ulcerated surface over the spine, just above the scapulæ; evidently the result of the application of a blister. There is no sloughing or discoloration over the sacrum.

The upper lip appears slightly swollen; it is pale; both lips are dry; the teeth are covered with black sordes; the tongue is dry and brown; the breath very offensive. She has passed since admission three watery stools, two of them into the bed. The abdo-

men is full and resonant, and somewhat tender, *i. e.*, generally. She has great difficulty in swallowing, and appears to suffer when pressure is made behind the angles of the lower jaw. The pulse is 120, very weak; heart's impulse very feeble; there is slight cough; respiration 36. Much sonorous rale is heard over the whole chest; a little submucous rale at the base of the left lung posteriorly.

Skin coarse; about twenty rose spots on the back, and about as many on the anterior surface of abdomen, and thorax dry.

She died on the 12th day of her stay in the hospital, and on about the 23rd of her illness.

The following was the course of particular symptoms:—

The pulse rose to 144 on the 15th day, and continued at that rate till the 18th day, when it fell to 132; on the following day it rose again to 150; it was 160 on the 19th day, and the morning of her death too rapid to count. It continued to grow daily weaker till the last. The respiration was 48 on the 15th day, and 66 on the day of her death.

Slight cough and abundant sonorous râle continued till death. There was little change in the appearance of the tongue till the 17th day, when it became slightly moist at the edges. On the 20th day it was decidedly moister and cleaner, at the same time it was rather red. On the 21st and 22nd days it was much cleaner and moist at the edges.

The breath continued very offensive till she died. There was no difficulty in swallowing after the 16th day. There was no alteration in the appearance of the upper lip.

She passed one watery stool daily till the 21st, when my notes state, "she has passed during the last twenty-four hours one scanty *solid* stool." On the 22nd she had two scanty hard stools, and on the day of her death two stools of pulpy consistence. She passed about one pint of urine daily. The abdomen, which on admission was, as I have said, full, resonant, and generally tender, became on the following day still fuller and more resonant. The tub-shape well marked. The belly was yet more blown on the 15th day, and the tenderness more decided. There was no change in the condition of the abdomen from the 15th day till her death.

On the 14th day the expression was dull and stupid. The sleepless delirium was replaced by somnolence, and both cheeks were flushed. She still moved in bed unassisted. On the 15th day she lost a few drops of blood from the nose. The somnolence was constant, and she was aroused with difficulty; the conjunctivæ were somewhat more injected than on admission; the pupils were rather large; the cheeks continued flushed; the expression duller; the prostration had markedly increased; she did not move in bed voluntarily, but lay exactly as she was placed on her sides or back; somnolence continued till death. On the 17th day the right cheek was flushed. She talked much in her sleep, and when aroused uttered a few incoherent sentences. At the same date she lay constantly on her back, with her knees drawn up. Subsultus tendinum was observed on the 19th day, and at the same time she sank towards the bottom of the bed.

On the 14th day the spots first noted were much paler, and several fresh rose spots were observed. Eight or ten others appeared on the abdomen and thorax on the 15th day, and several on the back. All those previously marked had disappeared on the 17th day; at the same time there were several fresh rose spots. On the 18th day the following note was made:—"There is no trace of some of the spots marked on the 16th day; those noted yesterday are paler. There are about eight fresh on the thorax and abdomen." On the 20th day I wrote of the spots noted on the 17th and 18th days; "part of both dates have disappeared; the others are paler. There are no new rose spots."

The following note was taken on the 23rd day, some 3 hours before her death:—

"Pulse very rapid and very weak; respiration 66; slight cough; sonorous and mucous râle over both sides of the chest anteriorly; no dulness of the same part; (she was too prostrate to be raised in bed;) somnolence constant; extreme prostration. Decumbency dorsal, knees elevated. Abdomen full, resonant, rounded; two stools relaxed; no spots; breath still most offensive. Urine 1½ pint." She died at half-past four p.m., on the 23rd day of the disease. At three p.m, she vomited a considerable quantity of dark, almost black, fluid; the vomiting was repeated several times before death; she also passed, during the last hour of life, two black liquid stools into bed. After the vomiting, she turned on to her face; and, though twice placed on her side, she replaced herself on to her face. She did not know her sister at three p.m. She died quietly; there were no convulsions. Six ounces of white wine were given daily, in divided doses, till the 15th day; the quantity was then increased to 8 ounces. On the morning of her death 3 ounces of brandy were added. Opiate enemata were administered to check the purging. A mustard poultice was applied to the throat on the day of admission. Nitro-muriatic acid was given the last few hours of life.

Examination of the body of Fanny P., Dec. 9th, 1848, twenty-two and a half hours after death. The weather warm for the season.

There was no cadaveric rigidity; some purple discoloration of the face, forehead, neck, and upper arms; there was no trace of the spots noted during life; the abdomen was moderately distended; about half an inch fat covered the abdominal parietes.

Head.—There was a little colourless serosity beneath the arachnoid; the pia mater was more congested than natural; a very small quantity of colourless, transparent fluid was found in the ventricles; the substance of the organ was firm throughout.

The *tongue* was covered with thick brown mucus; an ulcer about ¼ inch in diameter was seen on the left side of the organ, near the root of the anterior pillar of the velum; the base of this ulcer was formed of muscular fibres; its edges were pale and slightly elevated.

The *tonsils* were unaffected.

On the back of the *pharynx* was situated a large, irregularly-shaped ulcer—at one part ¾ inches in diameter; the floor of this ulcer was formed of dark-coloured muscular fibres; its edges were slightly elevated and sharp; around and beneath it were two or three similar but smaller ulcers; the mucous membrane of the pharynx generally was dusky red—around the ulcers dark purple.

The *œsophagus* pale; no trace of ulceration; its epithelium was still attached.

The *stomach* was negou; its mucous membrane pale and mammillated throughout, coated at places with thick mucus; the consistence and thickness of the mucous membrane was natural.

The *duodenum* and *jejunum* appeared perfectly healthy.

Ileum.—About three feet above the ilo-cœcal valve was a perfectly healthy Peyer's patch, without a trace of thickening or softening of its mucous membrane. About four inches lower was another patch, on the upper part of which was an ulcer a quarter of an inch in diameter; its edges thickened, and of a dusky red colour; its floor formed of submucous tissue, also of a dark red colour; the mucous membrane, in the vicinity of this ulcer, was slightly softened and considerably injected; the vessels running towards it were large, and filled with blood; the lower part of this patch was pale; its mucous membrane softened and slightly thickened. The next patch, in descending towards the cœcum, was a small one; its mucous membrane was vascular, softened, and slightly thickened. A small ulcer was seated near its lower extremity. From this spot downwards every patch was more or less extensively destroyed by ulceration, three, four, or more ulcers being seated on each patch. The floors of the ulcers were, in part or altogether, formed of transverse muscular fibres; their edges were considerably elevated, of a deep crimson, or of a slate colour; the latter hue was more marked in the vicinity of the cœcum than above.

Those portions of the agminated glands undestroyed by ulceration were slightly thickened; the thickening being due chiefly to a swollen state of the mucous membrane, but partly to a similar condition of the submucous tissue. There was no appearance of any deposit beneath or around the ulcers. At their edges, the submucous tissue was highly vascular. Among these large ulcers were several,—five or six—small and circular ulcers, apparently having their origin in the solitary glands; and, also, many slightly enlarged but yet non-ulcerated solitary glands. The mucous membrane generally was of normal consistence and colour to within two feet of the valve; at this point it was finely injected, but neither thickened nor softened. The last eight inches of the gut were pale.

Large intestines pale and healthy in appearance throughout. There was no enlargement of the solitary glands.

Peritoneum.—There was a little injection of the serous membrane, corresponding to the deepest ulcers in the ileum, but no deposit of lymph, and no opacity or thickening.

There was about five or six ounces of transparent yellow serosity in the peritoneal cavity.

The *mesentery* contained in its substance a considerable quantity of fat.

The *mesenteric glands* were of a dark purple colour and soft. Their size varied from a pea to a large bean. The largest and softest being seated near the lower part of the ileum.

The *liver* was flabby. Its substance appeared healthy.

The *gall bladder* was distended with thin orange-green bile. Its lining membrane appeared healthy.

The *spleen* large; weighed 11 ounces. It was flabby and rather soft.

The *pancreas* was pale and firm.

The *kidneys* were somewhat congested but firm.

The *urinary bladder* contracted.

Larynx and trachea.—These organs were in all respects normal in appearance.

There were about 12 ounces of transparent yellow serosity in either pleura. There were a few recent adhesions at the posterior part of the right lung.

The *left lung* weighed 16 ounces. It was of a dark purplish violet colour anteriorly; its posterior being scarcely darker than its anterior surface. Over the whole surface, from base to apex, were scattered at irregular intervals patches of variable size, of a deep purplish violet colour. The majority of these patches were distinct, bounded by interlobular septa. The number of lobules included in each patch, varied from one to eight or ten. On section the darkest coloured of these patches were found to be non-crepitant, and saturated with opaque bloody fluid; the cut surface was nearly uniform. Portions cut from these patches sunk in water. The less dark patches contained some air. The amount of air and fluid being in fact in an inverse ratio to the depth of colour. The whole lung contained an abnormal amount of frothy serosity, and scarcely less anteriorly than posteriorly.

The *right lung* weighed 21¾ ounces. It resembled, in general appearance, the right; but none of the patches were free from air; every part floated in water.

The *bronchial tubes* were filled with thin frothy mucus.

The bronchial mucous membrane was intensely congested, of a dusky red colour, the redness being in streaks, specks, and patches.

The *bronchial glands* were rather large and dark. One contained a mass of cretaceous matter the size of a large pea.

Case 25.—Without exposure to any known source of contagion—diarrhœa—loss of appetite—rigors—headache—debility—epistaxis—pain in the abdomen—gurgling in the right iliac fossa—enlargement of the spleen—rose spots—miliary vesicles—emaciation—tedious recovery—convalescent on about the 28th day.

R. P. R., aged 18, a plasterer, was admitted into the London Fever Hospital June 7th, 1849. He was a thin lad, fair skin, light hair and eyes. He stated, that his general health had always been good; that he had small-pox when a child. He had not suffered from want. He was a native of London. There was no source of contagion traceable. On Sunday, May 27th, he took some sulphate of magnesia, not because he felt ill, but to relieve a constipated state of the bowels. Some few hours after he washed his head in cold water. From that day his bowels have been relaxed. On the Monday and Tuesday he lay down on the grass in the open air, after considerable muscular exertion. He dated his present illness from the 31st of May. He said, that, while working in a cellar beneath the South-Eastern Counties Railway Office, Regent-circus, he observed a most offensive odour. In the afternoon of that day he had slight rigors, but continued his work. His bowels were then more relaxed than on the preceding days, and he experienced griping pains in the abdomen. On Saturday, June 2, he began to suffer from frontal headache. On Saturday evening, by the advice of a medical man, he took two aperient pills, and two more on Sunday. He was told these pills would work it all off. His appetite failed him on the 31st. On the 4th of June he lost a little blood from the nose. The epistaxis was repeated two or three times on the 5th; on the whole, about a teacupful of blood escaped. He is not subject to epistaxis. He vomited some green fluid on the 4th. The diarrhœa and pain in the abdomen continued till admission.

The following were the first notes made of this case:—

June 9th, *i.e.* the 14th day, reckoning from the commencement of diarrhœa. "He slept well last night, but talked in his sleep. The cheeks are slightly flushed; the expression of countenance is nearly natural; the mind is unaffected; the memory is good; there is no vertigo, no affection of the special senses; the conjunctivæ are pale, the pupils natural the complexion clear.

He feels weak, but can walk across the ward unassisted. The tongue is red and glazed, dry in the

centre and very slightly furred posteriorly. There is complete loss of appetite, no sore throat, and no marked thirst. During the last twenty-four hours he has passed three stools of pulpy consistence. He suffers occasional griping pains about the umbilicus. There is a little gurgling in the right iliac fossa. The superficial veins over the right iliac fossa are larger than those over the left. There is no tenderness, abnormal fulness, nor resonance of the abdomen. The splenic dulness is extensive, about six fingers breadth; it does not extend below the false ribs. The pulse 84, soft; respiration, 24. No cough. A little sonorous and sibilous râles on deep inspiration. The skin is hot and dry. He says he sweated freely in the night. There are no miliary vesicles. When I saw him yesterday afternoon, I marked about a dozen rose spots on the abdomen, thorax, and back. Those spots are now much paler than they then were, and several fresh spots, of similar character, *i. e.*, bright rose colour, circular, slightly elevated, disappearing on pressure and returning when the pressure is removed, have appeared.

On the following day the tongue was dry, glazed, and fissured over the greater part of its extent; he had passed three relaxed stools; in other respects his state was as before described. On the 21st day, reckoning from the date when he took the Epsom salts, the following notes were made:—Pulse 96; skin hot and dry; several fresh rose spots; those previously marked have either disappeared or they are much paler; the tongue is the same as on the 15th day; he has passed three relaxed stools; there is no abdominal tenderness nor pain: gurgling continues in the right iliac fossa, and the belly is very resonant. The mind is unaffected; he can leave or sit up in bed with facility; he sleeps well, but talks much in his sleep. On the next day more spots had disappeared, and fresh continued to make their appearance. A few miliary vesicles were observed for the first time; they were seated above and beneath the clavicles. He stated that he had sweated a good deal about two hours before the visit, but that he had often sweated as much since his admission; he had passed no stool for twenty-four hours; the miliary vesicles or sudamina had disappeared on the 17th day; in other respects he was the same. On the 18th day the pulse was 96; the skin dry; an abundant crop of minute miliary vesicles covered the chest and abdomen; he stated that he had sweated during the night freely and a little this morning; he talked much in his sleep; the expression of countenance was less lively and slightly anxious; the general strength was much more impaired, so that he left his bed with difficulty.

The tongue was cleaner, but fissured; he had passed one solid stool; on the next day the pulse had risen to 108; the skin was hot, harsh, and dry; the cheeks covered with a pink flush; the physical chest signs as on admission; the miliary vesicles continued abundant, though many had shrunk up; he passed two formed, solid stools; in two days I noted that his abdomen was fuller and more resonant, and he passed two loose stools; several fresh spots had appeared on the back; he grows thinner daily; in two days more, however, his pulse had fallen to 72; there was less heat of the skin; his tongue was cleaner; he ate a little bread; no fresh spots appeared, yet he was long in gaining his strength, and appeared to emaciate, even after all trace of the febrile symptoms had disappeared. This lad had a very tedious convalescence.

The treatment was expectant, with two small doses of Grey and Dover's powders.

Case 26.—After exposure to contagion, or the same cause which had produced typhoid fever in others—ensued gradually—loss of appetite—debility—diarrhœa—headache—quick pulse—fulness and resonance of abdomen—rose spots—convalescence on about the 24th day.

Charles B., aged 11, a spare-made, fair child, was admitted into the London Fever Hospital, under the care of Dr. Tweedie, Saturday, October 28th, 1848. His mother informed me that his previous health had been very good,—that he had never been ill before. His present illness began very gradually, about a fortnight before his admission, with loss of appetite, sense of fatigue, and faintness and pains in the limbs. He complained occasionally of chilliness and retched several times. His mother gave him a dose of aperient medicine, and after that his bowels were relaxed. What their condition was before he took medicine was doubtful. He continued up the greater part of the day, and even walked out of doors daily till the day preceding his admission, when, for the first time, had distinct rigors and headache. He then took to his bed.

This boy's sister was admitted into the hospital at the same time, suffering from typhoid fever. I went to the home of these children, in a court leading out of Great Tower-street. It was a wretched abode. The house dark, filthy, and offensive. The people begged hard for me to speak to "somebody," that its condition might be seen into; that the landlord might be compelled to whitewash the dingy walls and cleanse the offensive sewer. I found that death had visited their house,—the youngest child had died of brain fever with severe diarrhœa, and another child had suffered from fever, during which blood had passed in quantity from its bowels. I saw the surgeon, and learned from him particulars which convinced me that these two children, like the other two—Charles B. and his sister—had suffered from typhoid fever. Surely, while England tolerates the existence of these nurseries of disease, it is a mockery—a very cant—to appoint days of national fasting and humiliation, in the hope of staying the progress of epidemic scourges. As well might the drunkard, indulging in gin daily, pray God to spare him the miseries of diseased liver and its attendant dropsy.

On the 29th of October the following particulars were observed:—

He has had little sleep since his admission; his mind was unaffected. There was occasionally a little pain in the temples. The expression of countenance was natural; the complexion clear. There was no pains in the limbs, no rigors, no affection of the special senses.

He was able to walk with assistance, but he felt very weak. The tongue was moist, thinly furred—white. He had passed four relaxed stools during the preceding twenty-four hours. There was much thirst, no desire for food, neither abnormal fulness, resonance, tenderness, nor gurgling of the abdomen.

The pulse was 108, soft. There was trifling cough, a little sonorous râle. The skin was hot and dry. One imperfectly marked rose spot was noted on the back.

On the following day, the spot first observed had all but disappeared, and three fresh well-marked rose spots had come out. He complained spontaneously of frontal headache, and the abdomen was observed to be much fuller, and abnormally resonant.

His pulse rose the next day to 120, and preserved that rate for four days, it then fell to 108. Fresh rose spots continued to make their appearance every day or two till the 9th day after his admission; the number, however, present at one time, never exceeding a dozen. The bowels, on the 5th day after his admission, became, without known exciting cause, very much relaxed. He passed five watery stools in twenty-four hours. The tongue continued moist throughout.

On the 10th day, after admission, his pulse was 96. He slept well; the tongue was moist and clean; the appetite good, and he passed, in twenty-four hours, one solid stool.

With the exception of a little mist. cret. co. when the diarrhœa became severe, this case required nothing but fresh air, cleanliness, and restricted diet. The absurdity of active treatment in such cases as these is too manifest to require pointing out.

The reader's attention is particularly requested to the following points:—

1. These patients were all young.
2. In one instance only was contagion a probable exciting cause.
3. These cases agree with each other in the presence of the diagnostic symptom, *i. e.*, a succession of rose spots. The brother and sister who had the disease from exposure to the same cause, offered the same succession of rose spots. The two cases which proved fatal presented the anatomical character of typhoid fever, *i. e.*, lesion of Peyer's patches and enlargement of the mensenteric glands.
4. The duration of disease in these four cases varied between 23 and 33 days.
5. The case which proved fatal after the 30th day, did so from laryngeal disease, secondary to the primary affection, *i. e.*, the typhoid fever.

THE LATE DR. CRUCEFIX.—The papers announce the decease at Bath of Dr. Crucefix, well-known among the freemasons, and still more notorious as having been for years the occupier of a corner in the advertising columns of the daily and weekly journals, under the assumed name of Goss and Company, whose books, we believe, prove him to have been the originator of the Silent Friend system.

HOSPITAL REPORTS.

GUY'S HOSPITAL.

REMOVAL OF FIBROUS TUMOUR FROM THE EXTERNAL MALLEOLUS.

After removing a very painful cancerous growth from a woman of middle age, Mr. Coch next proceeded to operate upon a female who had for some time perceived a swelling growing from the foot, just below the outer malleolus. It was not painful, except when struck, but caused her considerable inconvenience while walking. Mr. Coch thought that it would probably prove to be a fibro-cartilaginous growth, with perhaps some bony tissue in its centre attaching it to the bone beneath, upon which it seemed to be slightly moveable. Should it be, however, too firmly fixed, the removal of the membrane on its surface would probably cause its absorption. He was led to operate, not because it in any way affected the patient's health, but on account of its mechanical inconvenience.

The patient, who did not take chloroform, bore the operation remarkably well. It was done as follows:—A crucial incision being made over the tumour, the flaps were dissected from off its surface, and attempts were made, with the fingers and handle of the knife, to separate it. It being too firmly attached to be taken away in this manner, its connexion with the subjacent parts were carefully divided on account of its proximity to the joint. It was only attached by fibrous tissue, of which, with a few cartilage cells intermixed, it was found to consist.

CASTRATION FOR MALIGNANT DISEASE OF THE TESTICLE.

The patient next brought in had laboured for a considerable period under enlargement of the left testicle, the nature of which had been very doubtful. It was an opaque, firm, resisting tumour, more like common enlarged and inflamed testicle. Pressure had been resorted to, as well as various other modes of treatment, under the impression that such might be its real character, but these means were unattended with benefit. An operation had therefore appeared to be the only resource, especially as the character of the tumour, considered with its incurability by methods usually effectual for the removal of non-malignant diseases of this part, seemed to point it out as malignant, probably medullary sarcoma. In this latter disorder, it is well known that the testicle will retain its shape, though enlarged, for a considerable time. The skin remains healthy, the patient suffers but little pain, and the cord may be swollen but not knotty.

The operation, which was well performed in the usual way by Mr. Coch, does not require detail. Five or six arteries required to be tied, and the upper part of the wound was then brought together by several closely-placed, interrupted sutures. The testicle was found diseased as was anticipated, but a small portion retained its proper tubular structure. It readily turned out from the surrounding areolar tissue, to which it was attached, the cavity of the tunica vaginalis having become obliterated. The man appeared in good health.

UNIVERSITY COLLEGE HOSPITAL.

On Thursday, the 21st, the following operations were performed:—

SOFT CATARACT—OPERATION FOR SOLUTION.

A little boy, apparently from six to eight years of age, was the first brought into the theatre. The right eye has the appearance of a former operation, which is said to have been performed in another hospital. The anterior chamber of this eye seems larger than natural; and the place of the lens is occupied with several white patches, fragments, doubtless, of the capsule of the lens rendered opaque by the operation. The vision of this eye is very imperfect.

The lens of the left eye is opaque, but not uniformly so. The opacity is more complete at some parts than others; being at one point quite white, while at others it is greyish. The *iris* is healthy, and acts well under the stimulus of light; and there is as much vision as could be expected

with such a state of the lens. Still, as there is strabismus, it is probable that the visual power of the organ would not be perfect, even if the lens were not opaque.

The pupil of the left eye being dilated with a solution of atropine, Mr. Quain introduced a needle in front of the iris, and with two or three touches divided the anterior surface of the lens.

ATRESIA IRIDIS—OPERATION FOR DRILLING THE LENS.

A boyish looking person, aged 20, florid countenance. Both eyes are diseased. That of the right side became dim about seven years ago, after a fall on his head, from which he was insensible during two days. He connects the impairment of the vision of this eye with the accident, though an interval of six months intervened. For two years he has been unable to discern even the light of the sun with this eye, though he has undergone a variety of treatment in different hospitals.

The left eye became "blood-shot," the patient says, about ten years ago, and the sight then became gradually so imperfect, that he was unable to distinguish objects, though he could readily know light from darkness. The iris is fixed at every point of its inner edge; and the pupil is filled with a brownish-yellow membranous structure." The condition of the organ was thus interpreted at the Clinical Lecture:—Ten years ago there was internal inflammation of the eye—a state which is commonly, though not quite sufficiently, named iritis; and lymph was then effused from the inflamed iris in such quantity, as at the same time to produce adhesion between that structure and the lens, and to form a sort of morbid pupillary membrane, completely filling up the pupil. The case is further complicated by some opacity of the cornea. This, however, is partial, (a couple of small patches,) and affects only the outer layer of the membrane.

Mr. Quain, with a straight needle, introduced through the lateral part of the cornea, perforated the lens, and then rotated the instrument within that body. He explained, that the object to be attained in the case was, the formation of an artificial pupil; but that, preparatory to undertaking the operation to establish an opening in the iris, he proposed to bring about the solution of the lens. This course was followed, because it had been found, by experience in cases similarly affected, that the attempt to form an artificial pupil was more likely to be successful if the lens were previously removed; and the only practicable mode of attaining this object is by solution. The suggestion was first made by Mr. Tyrrell, and the preliminary operation on the lens is known as "drilling." The interference with the lens and its capsule, in this case, is much less than in the operation for removal of soft cataract noticed in the former case, and the result is attained much more slowly.

ENCYSTED TUMOURS OF THE SCALP.

The next case was that of a female who had come into hospital to be disencumbered of some out of several encysted tumours of the scalp, varying in size from that of a pea to a small walnut. In all, there were nine of these formations, and their owner was anxious for the removal of four, which, from their position, were unpleasantly conspicuous.

Mr. Quain passed a scalpel in each case through the tumour and the integument at the same time, and then divided the parts outwards. Without dissection or any further incision, the cyst and its contents were then easily drawn away with a pair of forceps.

One of the tumours, which was very small, lay deeper than the rest, and was covered with fat, as well as the integument. The position of the cyst in this instance showed that these bodies are not necessarily developed in connexion with the skin.

KING'S COLLEGE HOSPITAL.

DIVISION OF URETHRAL STRICTURE.

Among other operations performed at this hospital last Saturday was one by Mr. Fergusson for division of stricture of the urethra, which he believed to have existed since infancy, the man having suffered from symptoms of it as long as his recollection would serve him; they were—difficulty of micturition, passing the water in a small stream, and frequently wetting himself when he walked about. The complaint became considerably worse after he had a clap ten years ago, the urine only dribbling away, and complete retention occurring now and then. No catheter had been passed during the last seven years, the stricture being too small to allow of its introduction. The patient was placed as for lithotomy on the table, with the buttocks just over its edge; and the hands were tied to the feet. As soon as the chloroform had rendered him insensible, a catheter was passed down to the seat of the stricture, and held steadily by an assistant. An incision was now made through the integument at the back of the scrotum, over that part of the urethra where the stricture was situated. The subjacent tissues being carefully dissected down to the urethra, it was laid open from the point of the catheter backwards. The catheter was then, after some difficulty, passed into the bladder, to remain while the wound heals. Mr. Fergusson observed, that early cases of stricture, though rare, are well known to exist; he did not doubt but that this man had been afflicted with it from childhood. He had long been under the care of various surgeons in the country, but without benefit, and had therefore been sent up to have the stricture divided. Other plans might have been adopted, as the application of the lunar caustic or the bougie. The latter appeared contra-indicated by the extreme pain caused by its introduction. No catheter could be passed into the bladder. Upon the whole, Mr. Fergusson deemed it a fitting case for the proceeding which he had adopted. There had been no urinary fistula or perinæal abscess. In many of the cases which he had treated, the operation seemed very simple and easily performed, but in others, as in the present, considerable difficulty had occurred, and he was glad to have such, as being instructive for the student. The stricture, in this case, was situated in the bulb of the urethra, and extended back to the triangular ligament, but not into the membranous portion of the urethra. The difficulty consisted chiefly in directing the point of the catheter and the knife so as to hit upon this part. Usually, a silver catheter seemed to pass more readily than any other, but he had, in this instance, been unable to introduce it, notwithstanding the use of as much force as was justifiable. A flexible catheter, which he had then used, readily entered the bladder; that it had done so was manifest from its position, and the urine which passed out of it. There had been much less bleeding than usual, which he attributed to the situation of the stricture. The man was healthy and robust, and would, in all probability, recover well. He observed, also, that the means which he would employ for puncturing the bladder were similar to those which he had now adopted. Such an operation would be more easily performed, for the distension of the bladder, and, probably, of a portion of the urethra, would not only serve as a guide, but also assist the operator by their resistance to the cutting instrument.

ABSCESS IN THE THIGH CONNECTED WITH THE BOWEL AND SIMULATING OBTURATOR HERNIA.

A *post-mortem* on a case of this kind was made at King's College Hospital a short time since, and as it presents various points of interest, showing the occasional difficulty of diagnosis in such disorders, we shall detail somewhat minutely the previous history of the patient, as well as the appearances revealed by dissection.

He was a thin, spare man, of active and moderately temperate habits, by occupation a plasterer, aged about fifty-three. He first applied with symptoms of strangulated hernia, on the 11th of November. It appeared that he had been subject to inguinal rupture of the right side for twenty years, of the left about five. He then began to wear a double truss, which kept the right side up, but occasionally allowed the left to slip under it; but he could readily return it. A week ago he began to feel a curious painful sensation down the inside of the left thigh, which seemed to take away voluntary motion, and, on examining the rupture on that side, he found that it had slipped down under the truss, and was sore and painful. Vomiting commenced, which was severe, frequent, and attended with much straining. On the previous day he had passed his usual evacuation readily and without effort. He had no medicine or advice, but tried himself, ineffectually, to return the rupture. The symptoms becoming more urgent he came to the Hospital. Mr. Elin, the House Surgeon, found that he had an oblique inguinal hernia on the left side, reaching into the scrotum; it was very tender to the touch, but soon returned into the abdomen, upon pressure being made over it, and he seemed much relieved. The truss was re-applied, and he was sent home. In the evening, however, the bowel again came down, and, the vomiting and pain returning, he was taken into the Hospital, the hernia readily reduced, and an enema of castor oil and gruel was administered. The vomiting and pain continued throughout the two following days, during which time nearly ten pints of injection were thrown up, of which only about a pint returned, on the evening of the second day, mixed with a few small sequelæ. After this, the gnawing pain in the thigh and the vomiting considerably abated, and he appeared calm and tranquil. Some of the vomited matters had a stercoraceous odour. The tongue was covered with a thick white fur. Pulse slightly accelerated. Skin hot. He stated, that he had passed his water freely since the commencement of the attack.

Nov. 14.—At present there is no hernial tumour to be discovered on either side, but the external abdominal rings are felt very patulous, and, when he sits up and coughs, the tumours may be felt at each impulse. The abdomen is tympanitic, not tender on pressure; but he complains greatly when pressure is made along the course of the femoral vessels in the upper thirds of the left thigh, especially over the crural opening. There is no redness or swelling in this situation. He was ordered two drachms of sulphate of magnesia every half-hour.

16th.—The vomiting at first seemed relieved by the medicines, which caused a copious evacuation the day before yesterday, but the former returned again last evening. He still complains of severe pain in the crural region, and a slight tumid elevation may be perceived just below the inner extremity of Poupart's ligament. This is very tender, and does not seem to be lessened by pressure. The superficial glands are slightly enlarged.

Thigh to be fomented. Continue the medicine, and repeat the enema.

We shall conclude the report of this case next week.

ST. GEORGE'S HOSPITAL.

DIVISION OF A CICATRIX.

A man was brought into the theatre with his face much disfigured, in consequence of an injury he had received, some months before, from the bursting of a gun. Half of the nose was wanting; there was a large scar on the left cheek, and a cicatrix on the same side, blocking up nearly one-half of the aperture of the mouth, causing altogether much disfigurement. The mode in which Mr. Johnson, under whom the man had been admitted, proceeded, was as follows:—Two incisions were made, from the upper and lower lips respectively, to a point in the cicatrix, somewhat farther out than the former angle of the mouth. The flap of the cicatrix was then carefully dissected up from without, inwards to the margin, which was reflected on to the mucous membrane, at which part it was divided. The mucous membrane and muscular fibres were then cut through with a pair of scissors, at a line equi-distant from the two previous incisions to the point where they met. The mucous membrane was turned over, and united to the margins of the skin by interrupted suture, in such a position as made it form the margin of the newly-formed part of the lips.

Among other observations, Mr. Johnson stated, that the face had been severely lacerated by the accident, which, in addition to blowing off the left nostril, had left a fissure, extending from the left angle of the mouth nearly to the inner canthus of the eye. A considerable portion of this remained ununited at the time of his admission into the Hospital, between two and three months ago, leaving a fissure similar in appearance to hare-lip, though in a different situation. The edges of this having been

pared and brought together with hare-lip needles, had united; but the cicatrix so contracted the orifice of the mouth, as to leave hardly sufficient room for the ingestion of food. It was to remedy this, as well as to improve the look of the patient, that the present operation had been resorted to. The flap of cicatrix removed, was dissected off so as to leave behind as much of the orbicularis oris as possible; though probably but little of it remained after the injury. The mucous membrane had been left, and divided, that it might be turned upwards and downwards to form the free margin of the newly-made lip. It was well-known that most membranes have a tendency, when inflamed, to throw out coagulable lymph, by which adjoining parts become united. The mucous membranes form a remarkable exception in this particular; for, instead of effusing lymph, their ordinary secretion is greatly increased, and hence adjoining surfaces rarely become glued together. For this reason, Mr. Johnson had preserved and formed for the lip a surface of that membrane.

EMPYEMA.—TAPPING THE CHEST.

On Thursday, March 21, Mr. Johnson operated on a boy labouring under this complaint, consequent on pleurisy of the left side, which followed an attack of small-pox about five weeks ago. The boy had been previously twice tapped at intervals of a week. On the first occasion twenty-six ounces of pus were drawn off; on the latter thirty-six ounces more. For about an hour after each tapping, his breath remained greatly relieved. At present there is dulness over nearly the whole of the left side, and the heart is considerably displaced. The left side of the chest is large and immobile, the intercostal spaces full and prominent. The wound made by the previous operation is not healed up, and there is a good deal of puffiness around, rendering it difficult to trace the ribs.

Mr. Johnson commenced by making a small incision with a lancet, through the integument over the centre of the seventh rib. Into this the trocar and canula were thrust obliquely, and turned over the upper margin of the same rib; thus avoiding all danger of wounding the intercostal artery, and making a good valvular aperture, to prevent the admission of air into the cavity of the chest. When the trocar was withdrawn, the pus flowed freely; but afterwards, as it came but slowly, three or four cupping-glasses were applied in succession to hasten the discharge. About four and twenty ounces were removed. The boy's breathing was evidently relieved, and the heart returned almost to its proper place.

Mr. Johnson observed, that he had been induced to resort to the practice of frequent tapping in cases like the present, for the same reason that Abernethy used to let out small quantities of pus at a time from lumbar abscesses. In this way the sac contracts; the adjoining parts gradually resume their proper places, and severe constitutional irritation is often prevented. It is of importance, in all these cases, to avoid puncturing too low, lest the diaphragm be wounded; as was once done even by so distinguished a surgeon as Dupuytren. To prevent this, the point of the instrument should be turned well up when thrust into the cavity. On the first day he had tapped between the fifth and sixth ribs; on the last, as to-day, between the sixth and seventh. It was also desirable, in these cases, to make a good valvular incision, to prevent the admission of air. When the canula is withdrawn, if the air should enter, it would be better to make a free incision. Various methods had been invented by means of stop-cocks and valves to prevent the passage of air through the canula, when the patient inspires. Mr. Johnson considered these to be useless complications, as the finger could always, if necessary, be applied to the mouth of the instrument, just previous to inspiration, which might readily be ascertained, by watching the action of the abdominal muscles.

NÆVUS.

Mr. Hewitt operated on a child which had been sent up from the country, to see whether anything could be done for the removal of a large mole, situate at the outer canthus of the left eye, and involving the eyelids. It had latterly increased rapidly. Mr. Hewitt described it as partaking partly of the characteristics of a watery growth, and partly of those of a nævus. He had removed a small portion of it with the scissors, and had then applied a compress of lint to check the hæmorrhage. It was his intention to apply nitric acid or nitrate of silver in the course of a day or two to burn away the remaining portions. Chloroform was given in this as well as in Mr. Johnson's first case.

DUBLIN NORTH UNION WORKHOUSE.

A CASE OF DISLOCATION OF THE HEAD OF THE HUMERUS FORWARD.

Margaret Horan, a servant, aged 40, admitted into the workhouse on the 20th of February, 1850, states, that twelve months ago she was washing a shop front, and was obliged to ascend a ladder for that purpose; and, when at about an elevation of six feet, the ladder slipped from the plank on which it rested; she was thrown with considerable force against the steps of the door; the corner of one of them struck the posterior part of the left shoulder. After the lapse of some minutes she was taken to the hospital; the shoulder was examined that evening, and next morning, the bones being supposed to be in their normal position, she was discharged, with directions to keep the arm quiet and use evaporating lotions. It is now twelve months ago since Margaret Horan received the blow on the posterior part of the left shoulder, and the following symptoms, observed on her admission into the workhouse hospital, clearly demonstrated the nature of the injury. On viewing the external aspect of the left gleno-humeral articulation, we perceived the deltoid much flattened, and, on abducting the arm, there was a concavity extending from the origin to the insertion of that muscle; the acromion process was sharp and projecting; posteriorly, there was a marked depression below the external third of the spine of the scapula; anteriorly, there was a prominence beneath the clavicle, which, on examination, was found to be the head of the humerus. On applying the measuring tape from the acromion process, either to the olecranon or the external condyle of the humerus, there was an elongation of an inch on the injured side. The circumference of the arm, on a line with the lower edge of the pectorales major, was an inch less on left side. There was no œdema of forearm or fingers; change of weather produces pain in and about the joint; she cannot raise the arm to the head, but can bring it forward without inconvenience; she is unable to undo her dress with it.

Pertinent Remarks.—The length of time the humerus is dislocated forbids an attempt being made at its reduction. We have always found elongation of the arm in dislocation forward,—the contrary is stated in the works on the subject. This woman is now obliged to become an inmate of a poorhouse, in consequence of the nature of the injury being overlooked, and the time let go by when surgical aid could avail. When called on to attend injuries of joints, we should be very careful in our examination of the parts, lest, hereafter, our diagnosis should prove to be incorrect, and be attended with irreparable injury to the patient.

PROGRESS OF MEDICAL SCIENCE.

DENMARK.

[Copenhagen Correspondence.]

DISCOVERY OF CASEINE IN THE BLOOD.

I certainly have given you occasion for a most unfavourable opinion of your Copenhagen correspondent, by not even having finished a paper for your Journal, begun four months ago.

* * * *

I have now to direct your attention to an original paper, inserted in the January number of my own Journal (*Bibliothek for Læger*) by my countryman, M. Panum, assistant-physician to the Common Hospital of Copenhagen, most distinguished young man, long engaged in a series of researches concerning physiological and pathological chemistry. In pursuing his researches on some other matter, M. Panum accidentally met with a phenomenon that successively has led him to a discovery, which, perhaps, might become of no little consequence to science. He found that blood serum, when mixed with water, in a proportion of 1 to 9 or 10, gives a whitish turbid fluid, from which a sediment is discharged. He at first ascribed the phenomenon to the salts of the common water, but soon found that distilled water had the same effects, and, further, that the fluid always grew more turbid, and the sediment larger, by being exposed to the open air. He then convinced himself, by experiment, that this circumstance only must be ascribed to the carbonic acid present in the atmosphere, whereupon he was led to try the effect of some other acid on the solution of serum of blood in distilled water.

He then found that the addition of very diluted acetic acid to a mixture of blood serum and distilled water, always precipitated a very copious whitish sediment (1 ounce of serum in a cylindric glass, of a diameter of 2½ inches, will give a sediment of about 1-6th of an inch). This sediment again, is dissolved by a surplus of acetic acid, but, when collected by filtration and dried, it constitutes a yellow-greyish, somewhat transparent, friable matter. The chemical reaction of this sediment makes it certain that it is a combination of protein, insoluble in water; that it neither is fibrine, nor albumen, but that it pre-exists in the blood serum, and only is precipitated when the salts of the serum are diluted with water, and the alkali of the serum united to acetic acid. M. Panum further shows, that, being insoluble in water, and not being affected by any other matter of the atmospheric air than its carbonic acid, this precipitate, according to its physical, chemical, and microscopic characters, cannot well be considered otherwise than as *Caseine*.

M. Panum's experiments are instituted with great accuracy, and his assertions are founded upon no small number of observations, made during a space of two or three months. In forty analyses of human blood, partly from healthy individuals of different ages and of different sexes, partly from patients suffering from acute and chronic diseases of the lungs and the heart, from morbus Brightii, gastric fevers, delirium tremens, &c., he *always* has had the same result of the above-mentioned operations. The same matter, too, being found in the blood of calves, oxen, sheep, and swine, there seems to be no doubt but that the blood serum constantly contains Caseine in a considerable proportion, and in such combinations, that the acetic acid of the organism, under some circumstances, may at one time precipitate it, at another dissolve it.

The fibrine hitherto being the only one of the elements of the blood of which it was sure that during life, it might pass from a soluble to an insoluble state, has obtained a very great consequence as well in pathology as in physiology. Yet the recent physiologists, (at least the German ones,) certainly have abused this property of the fibrine to the construction of hypotheses, rather founded on wild speculation than on true observation. It accordingly is to be presumed, that the discovery of M. Panum, when further prosecuted and elucidated, may put an end to many an error as to the part which the fibrine of blood really performs in the human organism. The constant presence in blood of a substance so liable to transformation as that described by M. Panum, certainly must have no little influence on many of the processes of nutrition, and, probably, on many of the pathological ones too.

I therefore think, my dear Sir, that it might be agreeable to you to be the first to communicate these observations of M. Panum's to the British public. For further details I shall refer, partly to the original paper in the *Bibliothek for Læger*, (which you, perhaps, will receive very soon after this, through a friend of mine, who is leaving for London,) and, partly, to a communication which M. Panum himself has sent to *Virchow's Archives*, but which, I suppose, is not yet published.

[We prefer to leave our correspondent's letter in its *original* English, rather than to re-write it. Anything from the pen of M. Selmer, the talented Editor of the leading Danish Medical Journal, cannot fail to be acceptable to our readers. — Ed. *Medical Times.*]

IRELAND.

[Dublin Correspondence.]

WHAT IS THE USE OF THE SPLEEN?

Some new views of Sir James Murray, on the "Function and Offices of the Spleen;" that very debateable ground of all the older physiologists, claim our attention this week. All ordinarily read men would think that the functions of this organ were now clearly made out to be, that of vitalising or renewing the blood; its trabecular tissue so like a complex system of ganglions; its mysteriously rolled up fibre cells; its Malpighian corpuscles, so curiously connected with the pencils of arteries running into it; that never-ending, still-beginning process of cell formation, all pointing so obviously in this direction. Sir James, however, (at present in Galway,) propounded his notions to the College of Edinburgh, and they must be right. Much to the credit of our astute friends of the Surgical Society of Dublin, at the discussion which took place, a considerable amount of dubiousness was shown, and little of a corroborative character brought forward. It seems in the year 1828, *Consule Planco*—*i. e.*, when our rivals at the top side of the Tweed were not quite so learned as now—the subject was first considered by the Edinburgh University, and Sir James, we take it, rewarded with his present degree. The chief point of his memoir, then and now, would seem to be, that the spleen is "a focus of heat to the stomach and ingesta;" and, as a corollary that puzzles our old medical legends, we must confess, that "if even the blood of the spleen part with *one* degree of temperature to the colder pulp of the stomach, then the latter would be raised to blood-heat" in less than no time. There were no Matteuchis in this fine primitive age, so Sir James was particular, at the Surgical Society last week, in fixing the date of his discovery. Twenty years' experience has served to make him only more in love with it; and, in addition to it, he now says, "that a series of electric currents emanate from the spleen to the stomach" during this heat-giving process. And, among other things, that the activity of the currents vary according to the degree of splenic distention through the vessels, or rather *sinuses* of the spleen; not aware, good easy mortal, that those sinuses have no existence at all. Next, he states that the currents are more intense in proportion to the blood's heat and "friction of the circulation" in the larger splenic arterial branches; that in a minor degree similar phenomena ensue even out of the body; that a spleen recently taken out of an animal, insulated and injected with tepid fluid, determines a positive current towards the gastric surface—proving, perhaps, just nothing at all; that contraction of erectile tissue ensues, when the extremities of a gold and silver wire touch at one point the nerve, and at another the erectile tissue of the spleen; arising, we take it, from the intensely acid re-action of the spleen. That slices of spleen are better voltaic piles than either brain, liver, or kidney; the same cause possibly, but proving little as to its vital offices, that the intensity of galvanic currents along the *vasa brevia* from the spleen, continue into the recently swallowed ingesta, are, in fact, the grand secret of digestion and its troublesome relative, indigestion; the stomach, according to our author, being a mere passive receiver or conductor of such influence. The spleen, the grand "natural battery," furnishing another argument, Sir James says, that "nothing was made in vain." A rather lame, an impotent one, we should say; but we should not be too hard on our Edinburgh school, when Gerlach and Kolliker can spare time to differ about this singular organ, and our other microscopists are equally at variance as to the exact change the blood corpuscles undergo in it; the subject, however, is one of increasing interest, and, in a practical way of looking at it, not at all to be despised. Hewson, long ago, set us on the proper track, it now turns out; and pathological reasonings and observations are only wanted to fill up a great *hiatus* in our physiological knowledge of the *exact* change the blood undergoes.

That some such changes as those alluded to (if we put mere vital force for galvanism) do take place through the channel of the circulation there can be little doubt. Kolliker, need I say, has all but seen the cells forming in the spleen, strongly resembling chyle corpuscles. The effused (venous?) blood in the spleen, too, is constant; always undergoing dissolution, according to this eminent physiologist, and, as constantly, re-composition, if we are to believe Gerlach; the *debris* of this singular process escaping into the circulation. In animals fasting, these corpuscles disappear. The effusion of blood in the spleen has been recently classed with the bursting of a Graafian vesicle, a fact of very curious importance, and likely to throw some light on the "periodicity" of disease; this organ being singularly affected in ague, and not less when quinine has been given. The splenic veins, I need scarcely say, are destitute of valves; the arteries do not anastomose; the Malpighian corpuscles, like "currants on the branches" of the arteries; facts that militate mightily, I should say, against these ideas of Sir James Murray, though they do bear the high *prestige* of Edinburgh attached to them. In fact, every one who has at all studied the subject, must perceive that this organ, which seemed such a puzzle to our forefathers, is intimately connected with the formation of new blood corpuscles from chyle corpuscles; that its soft consistence depends on effused materials undergoing change; like the germinal vesicle, perhaps, and its spermatozoon; that possibly the entire organ, as well suggested by Dr. Jackson, receives more of our ordinary fluid aliments by venous absorption than we give it credit for, and acts a part not unlike the right and left side of the heart towards the lungs and system towards its system; the porta possibly returning vessels, certainly not this sort of galvanic battery brought under the notice of the Dublin portion of the Profession.

MEDICO-LEGAL QUESTIONS.

Two rather interesting medico-legal questions have been tried at the Southern Assizes. In one instance, two persons were charged with the murder of a woman named Ellen Dwyer, and secretly burying her. A most minute account of the murder was given, and the strong positive fact adduced, that the murdered woman has never been seen since. The alleged skeleton, found in a quarry, was produced in Court, to the no small terror of judge and jury. On examination, however, by the Medical witnesses, it was found that the humerus and femur of one side did not belong to the same body at all, and that the skull belonged to a much older skeleton! The chief witness was found guilty of well-arranged and deliberate perjury.

In the second case, of a nature not less grave, a respectable individual, moving in a class far removed from the latter, was indicted for the murder of his wife and servant. The only question to be decided was, whether, at the time of the act, he was within the very puzzling meaning of the law, insane. There seemed no sufficient cause proved for the committal of the act. On the contrary, in the early part of the trial, it was sworn he was fond of his wife, and the night before the deed, being November eve, enjoyed himself with apples and nuts. In the morning, however, he was found ranging about with a bayonet in his hand, and at once confessed he was the person who committed the act. On being arrested he seemed more annoyed at his vanity being hurt by handcuffs than at the serious character of the crime with which he was charged, and gave a long, rambling account of the transaction anything but like the detail a sane man would give. Two years ago, a jury gave it as their opinion he was *insane*, but on the present occasion reversed the verdict—the wretched man being sentenced to be hanged. It is to be hoped the attention of Lord Clarendon will be drawn to the conflicting nature of the Medical testimony, and give the miserable man the benefit of the doubt. The evidence of the chief witness in the Medical way went to show he feigned madness *some time after*.

BENEVOLENCE.—Mr. Russell Blackbird, of Villa Real, Newcastle-upon-Tyne, has left a legacy amounting to 500*l.* to the Newcastle and Durham Infirmary; 500*l.* to the Newcastle Dispensary; 500*l.* to the Eye Infirmary; and 200*l.* to the Victoria Asylum for the blind; besides several legacies to Religious Institutions.

SELECTIONS FROM FOREIGN JOURNALS.

CAUSES OF DYSPEPSIA.

Chomel, in one of his Clinical Lectures, enumerates the following causes of dyspepsia:—

1. Errors of diet, viz., as respects food, liquid, or period of meals, or persistence in an article of food hurtful to the particular idiosyncracy of the individual.
2. Deficiency of resistance in the abdominal walls, as a consequence of previous pregnancies, or of great corpulency, &c.
3. Habitual compression of the abdomen by corsets, bands, or other methods.
4. Use of improper medicines.
5. Unfavourable hygienic conditions, dependent on exercise, intellectual occupations, or moral emotions.
6. *Accessory circumstances.*—Dyspepsia can depend, like rheumatism and gout, on some principle diffused universally through the system.
7. Original feebleness and susceptibility of the stomach and intestines.

With respect to the diagnosis of dyspepsia, Chomel remarks on the extreme difficulty of distinguishing between idiopathic dyspepsia, following the causes above enumerated, and symptomatic dyspepsia occurring in consequence of cancer of the stomach, gastritis, softening, disease of the liver, &c. A very accurate and prolonged examination can alone draw the distinction. Certain diseases of the kidneys, the uterus, and the brain, gave rise rather to one or two symptoms of deranged digestion, such as vomiting, than to the collection of symptoms termed dyspepsia.—*L'Union Médicale*, March 9.

DEATH OF M. MARJOLIN.

In the funeral discourse pronounced by Dubois (d'Amiens) over the body of this distinguished surgeon, we find the following interesting anecdote:—"Henri Meyer of Berlin, and Leger of Stuttgard, announced to their friends, in their last illness, with an admirable serenity, the precise moment of their deaths; so also Marjolin, with an inexpressible calmness, conversed with his son a short time before his death; and, as if to prepare him for that terrible event, spoke to him of it as a termination and *dénouement* foreseen and natural. 'This night,' said he, 'is the last you will have to pass in watching; I shall die to-morrow shortly before daybreak.' He did, in fact, die at five o'clock in the morning, having preserved, to the last moment, all the clearness of his intellect, and the tranquillity of his soul."—*L'Union Méd.*, March 9.

TREATMENT OF RETROVERSION OF THE UTERUS.

In the long discussion on the diseases of the uterus, before the Academy, and lately more fully in the *Gazette Médicale*, M. Amussat has proposed a new method of treating obstinately retroverted uterus, viz., the cauterization of the posterior surface of the uterine neck, and the adjoining portion of the vagina, so that adhesion may subsequently take place between these two surfaces. The cauterization must be sufficiently severe to cause slight ulceration. The caustic used by Amussat is the "potassa cum calce;" it is applied to the posterior part of the neck of the uterus, which is then lightly wiped, and made to press against the posterior vaginal wall by the insertion of pledgets of lint between the neck and the anterior wall; the caustic imbibed by the posterior face of the neck is sufficient to ulcerate lightly the vaginal wall.—*Gaz. Méd.*, March 2.

ANOMALY OF A RENAL ARTERY.

The following distribution has been lately noticed by M. Verneuil. A right kidney presented three arteries, viz.:—

1. A principal central artery representing the ordinary renal artery.
2. A smaller inferior artery, passing to the lower part of the kidney.
3. A much smaller superior artery passing to the summit of the kidney.

These three vessels were parallel, rectilinear, did not anastomose, and arose from the aorta at right

angles. A vein accompanied each artery, and opened separately into the vena cava.—*Gaz. Méd.*, March 9.

DISAPPEARANCE OF THE PANCREAS.

M. Bernard exhibited, at a late meeting of the Société de Biologie, a dog, in whom a pancreatic fistula had been made. The animal died in a state of profound emaciation. On examination no trace of the pancreas could be found. M. Bernard believes, that having made too large an opening between the duodenum and the pancreatic duct, the bile penetrated into the pancreas, and produced the "digestion" of that organ.—*Gaz. Méd.*, March 9.

HIPPURIC ACID IN THE BLOOD OF THE OX.

The existence of this acid as a constituent of healthy bullock's blood has been affirmed by Verdeil and Dollfus. It was recognised by the form of its crystals, (viz., four-sided prisms, with dihedral summits;) its slight solubility in cold water; its melting at a temperature a little above 212° Fahr., with the aromatic odour of benzoin.—*Gaz. Méd.*, March 9.

ALBUMINURIA DURING PREGNANCY.

In an inaugural thesis by M. Blot, on this subject, we find the presence of albumen in the urine noted in 41 out of 205 cases. Of the 48 cases collected by the author, only 7 had convulsions, and the quantity of albumen in these cases was not greater than in the other cases. In six autopsies of pregnant women with albuminous urine, the kidneys were quite healthy in three cases; in the other three cases the appearances were those assigned by Rayer to the third degree of Bright's disease, viz., volume and weight a little augmented, cortical substance of a uniform pale rose, or slightly yellow colour, rather enlarged, especially between the pyramids; light injection of mucous membrane of pelvis; no adhesion between capsule and substance, &c.—*Gaz. Méd.*, March 9.

EXTERNAL APPLICATION OF CHLOROFORM IN NEURALGIA.

M. Fricaud records two cases, one of most severe intercostal neuralgia, and the other of neuralgic pains of the vertebral column, and more or less of the whole of one side of the body; these pains were not relieved by leeches and opium. In both cases the copious application of chloroform to the painful parts removed the pains as by enchantment. (*L'Un. Med.*, Feb. 28.)

CEREBRO-SPINAL MENINGITIS.

M. Maillot, in an able paper on this severe disease, gives the following recapitulation of its prominent symptoms:—Headache, more or less marked rigidity of the vertebral column, coma, and delirium, were almost constant symptoms. Cramps in the lower extremities, vomiting at the commencement of the illness, hyperæsthesia of the skin, and great sensibility to cold, spasms of the muscles of the extremities, especially of the arms, were also frequent symptoms. There was little fever. In almost all cases the patients had pain, either in the cervical or the lumbar region. This pain was the prelude of more grave phenomena, such as the rigidity of the muscles of the head, trismus, opisthotonos, &c. The skin was not hotter than usual. Many patients complained of cold; others, in a state of stupor, yet had an exaggerated sensibility of the skin. The pulse became quick during the latter stages.

DIABETES IN ANIMALS.

M. Leblanc (veterinary surgeon) has addressed a note to the French Academy of Medicine, relative to the occurrence of saccharine diabetes in a bitch, who had fed all her life on raw meat. (*L'Un. Med.*, Feb. 21.)

CHANGES IN THE MUSCULAR IRRITABILITY AFTER DEATH.

Brown Sequard describes six periods or stages through which the muscles pass after death; viz.,—

1. The contractility remains nearly as during life.
2. Irritation excites rigid contractions. These contractions do not occur as in health, when the molecules approach themselves rapidly, and as rapidly separate; now the approximation is gradual, and the subsequent separation as slow.
3. Complete flaccidity.
4. Rigor mortis.
5. Rigor mortis disappeared.
6. Putrefaction.

The duration and the energy of the muscular irritability are said to be in direct proportion to the amount of contractile force of the muscles at the moment of death. The contractile force can be lessened or annihilated during life, or at the moment of death, by three circumstances, viz.:—1. Impairment in the quantity or quality of the blood. 2. Exhaustion of the force by previous calls upon it. 3. Actions of some poisons. (*Gaz. Med.*, Feb. 2, 1850.)

GUN-SHOT WOUNDS.

The result of the late wars in Italy have been put together by Rostolli, and, if offering but few new points, it is interesting to find he corroborates the views laid down by the French Academy and those of Mr. Guthrie, (with some few modifications,) in this country. Setting out with the fact of a gun-shot wound being, in a very marked manner, a contused wound; he states, that *debridement* did not prove, as a general rule, useful,—that primary hæmorrhage is not at all so often met with, nor so dangerous, as secondary hæmorrhage;—that, for the latter, plugging the wound seemed to answer best;—that foreign bodies, not removed, proved a source of tetanus, and long and troublesome suppurations;—that primary amputation alone saved those wounded; the number of deaths in secondary amputation being equal to that of recoveries under the former mode of proceeding;—that the chances of saving the upper extremities, *cæteris paribus*, is greater than that of saving the lower;—that disarticulation is often preferable to amputation;—that ice and cold applications are inadmissible, except in cases of very high inflammation; and that emollients, poultices, &c., are to be avoided, as well as anything of a relaxing nature.

The Italians have a great dread of purulent absorption; the immense number of 400 cases of hospital gangrene were induced by it. This disease, he is led to believe truly contagious among the wounded; and, from some experiments, *capable of production by inoculation*. The action of the virus, he believes, truly local, and not conveyed to the system; the virus, he says, does not spare any tissue, but attacks, at first, the cellular membrane of the part; that active local treatment is the only hope of the surgeon,—internal treatment being merely of subsidiary importance. That the former consists of the immediate use of the most potent caustics,—the red iron, caustic potash, or one of the mineral acids. He believes caustic potash the best, and to have some specific action. Having used the caustic freely, he found himself always in a position to perform any other operation that might be necessary, without the fear of the new wound taking on the diseased action. That hospital gangrene, left to itself, he always found fatal. The virus, he thought, much more easily caught by those of the soldiers labouring under syphilis. He found the disease come on two or three days after inoculation. The disease, with these characteristics, had a tendency to recur.—*Annali Universali di Medicin.*

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THE MEDICAL TIMES.

SATURDAY, MARCH 30, 1850.

Englishmen are apt to exult in a thirty years' peace, and to pride themselves in the fact, that for that period, except in trivial instances, war has not caused a sacrifice of human life. It were but to recite again some of the atrocities enacted on the fields of Culloden or Waterloo, or in our Indian campaigns, and the sympathies of our countrymen would immediately evince themselves in peace demonstrations and agitations for national arbitraments; in fact, society is, or pretends to be, anxious for the preservation of life, and jealous of war, as the grand enemy to that principle.

We might perhaps hazard our reputation as journalists, by refusing to the nation the credit of so much humanity, and we may call down upon us the anathemas of many of the world's philanthropists, when we style much of its humanity sheer hypocrisy and cant. Yet we say, that without the excuses which may often be advanced for the practice of war, and without the qualifications by which its attendant barbarities are often mollified, we are daily and hourly witnesses to the sacrifice of human life. During the progress of the cholera in the past year, the public records constantly brought home to us details of the condition—the abject condition, in which large masses of our population were "vegetating"—it was shown, over and over again, that the conditions did not harmonize with human requirements, and that, whatever might be the prime causes of that fell visitation, the localities were well marked, in which it found food to satisfy its cravings, and scope in the which to exercise its terrific powers. The enemy did not come upon us unawares;—it was no lightning's flash, or thunder's bolt; a note, distinct in its utterance, was sounded, and for ten long months, at least, before its most fearful onslaught, the approach of the cholera had been heralded, and, in those more feeble utterances, gave the same evidence of its predilections as when, at last, it spoke in the rude whirlwind of destruction. And what was the result? To chronicle all the *talk* would monopolise our pages till doomsday,—while to report sterling effort would leave the nutshell but half occupied. It was said, *and was proved*, that intramural-burials were poisoning the air with noxious exhalations, and rendering localities totally unfit for human habitation,—and an honest regard for the preservation of life demanded their abandonment; but vested interests, appertaining to religion, came in, and either denied the nuisance or justified its perpetuity. It was said, *and was proved*, that the habitations in which our working-classes resided, were undrained, unventilated, and destitute of water, and that in such places cholera committed its most fearful ravages; but vested interests, again, were of too sacred a nature, and authorities refused to deal with landlords, or entrench upon their prerogative. It is to the lasting disgrace of the country, that, notwithstanding dire warnings, and most fearful experience, the same ill conditions are now left again to produce the same results.

With all the records of the late disease before us, and amidst all the lessons which, by them, were taught, if not learnt, there are now weekly pouring in to the Office of the Registrar-General details of deaths taking place in the ill-drained, unventilated, noisome holes of this Metropolis. Taking the Weekly Report (No. 5) for example, we have as follows:—

In Crown-court, *Pall-mall.* A Death. Atrophy. "The houses are badly ventilated, only a few having any back windows."

In Market-street, Tottenham. A Death.

Hydrocephalus. "Over-crowded and badly ventilated."

In Pancras-place. A Death. Tubercular Disease of the Lungs. "Old dirty houses, which are much in want of repair, and inhabited by many families. The back is enclosed by small old houses, occupied by very poor persons. The landlords do nothing to render the place more habitable, and it is, therefore, more neglected than ever."

In Church-lane, St. Giles's. A Death. Phthisis. "The majority of the houses in the lane are over-crowded, ill-cleansed, and badly ventilated; without water, privies, or a general sewer. The soil is thrown from some of the houses into the street, causing an offensive smell, and rendering the locality most unhealthy."

In George's-court, St. George's-in-the-East. A Death. Phrenitis. "This is a narrow and ill-ventilated thoroughfare, occupied by very poor persons."

In May-pole-alley, Kent-road. A Death. Measles and Pneumonia. "The inhabitants of this miserable spot complain bitterly of the want of water. To supply all the houses in the alley there are only two small pipes, from which the water runs from 5 to 7 in the morning; and it is a frequent occurrence for persons to stay up all night, that they may secure a supply in the morning."

In Old Castle-street, Hackney-road. A Death. "A crowded street, which has no communication with a good sewer that is situated therein." And in New Nichol-street. A Death. Dentition and Diarrhœa. "Close, crowded, and without drainage."

At Providence-row, Lambeth. A Death. "This house is extremely crowded with very poor people, is badly cleansed, and, in the opinion of the parish surgeon, is very unhealthy."

In James-street, Lambeth. A death, Typhus. "The street is built on a marsh, and here slaughter-houses and pigstyes abound."

In Orchard and Melon Ground, Peckham. Several Deaths. "These places are generally low ground, badly drained, and ill-ventilated, and the inhabitants, who are very poor, suffered severely from the late epidemic."

In Spread-eagle-court, Rotherhithe. A Death. Diarrhœa. "The drainage is bad, and the court, from its filthy state, altogether unfavourable to health."

Now, we say, for what purpose is the office of Registrar-General, and of what use are the Bills of Mortality which constantly issue from Somerset-House? and is the above officer to be believed when he records such instances as the above? To judge by the results, one would imagine that all the statements appearing in these official documents were only to be treated as the offspring of an inventive imagination, and that the public Officer had private interests to serve, or a morbid taste for the gloomy; while our readers well know, from sad experience, that he is both to be believed, and that his statements are to be taken as only showing a fraction of the disgraceful condition of parts of the Metropolis, since his observations extend only to those localities where deaths occur, and do not relate to those nurseries of disease where men drag out an existence of ill-health and squalid poverty. Again, we ask, Why not save the expense of the office of Registrar of Deaths? Who wants to know anything of it? Most certainly landlords do not. We shall see whether the Legislature does.

In the contemplation of this subject, we cannot help, in our minds, recurring to the history of the ancient nations of the earth, and, in recollection of our own filthy sanitary condition, standing in awe and astonishment at some of their appliances for the good of the public health. The explorers into the ancient monuments of Etruria find the cromlechs, the tumuli, and the rock-hewn chambers, not in the midst of what was once a city, but outside its boundaries. To the Greeks the same remark applies. The magnificent aqueducts of the Romans, alluded to by Frontinus, Pliny, and others, testify, at least to their care that water should be sure; while, in their construction, go where we will, the present condition of some of them testifies, that genius and talent were displayed of the highest order. Of the Cloaca Maxima, near the Meta Sudans, it is said by Strabo, that it daily conveyed along its channel the floods of water poured into the Imperial City by its ten acqueducts—a supply six times greater than the whole amount now furnished to the Metropolis of England. And so of drainage. That mighty work, the Colosseum, even in its very ruins, bore evidence, that the Roman engineers displayed far superior talents in the carrying off the waters from the buildings they constructed to those evinced by their successors; and the writings of the Marquis Scipio Maffei, of Zendrini, Grandi, and Genneté, discover an amount of scientific acquirement on the subject of drainage and the laws of hydraulics, which modern engineers have been obliged to quote and equally glad to apply. Shame to us, that England has yet, in her very Metropolis, to emulate the sanitary arrangements of heathen nations, instead of infinitely transcending them.

NATIONAL HOSPITAL FOR CHILDREN.

With some surprise we have received this week two pamphlets: one "On the Importance to the Public of an Hospital for Sick Children;" and the other "An Appeal to the Medical Profession in its Behalf." Both shall receive our most careful consideration.

It may well cause surprise that, while in other capitals of Europe special Hospitals for sick children exist, hitherto no similar charity has been established here. In 1816 the Royal Infirmary for Children was instituted to fulfil this object; but, although it does much good in Lambeth as a Dispensary, no in-patients are admitted there, and its situation and circumstances are not those which make it suitable for such an Hospital as London ought to possess.

To the Medical man, the close relation that subsists between Hospitals and Medical knowledge and skill can alone be known. No words can express this truth more admirably than a passage from a letter by Dr. Latham, in one of the pamphlets before us. He says—

"The first Hospital for Diseases of the Eye, in England, was not established before the early part of the present century. Before that time there were Ophthalmic Surgeons, but there was no Ophthalmic Surgery. In this country, Ophthalmic Surgery was literally created by the first Ophthalmic Hospital, founded by Mr. Saunders, in Charterhouse-square. It has advanced in proportion as Ophthalmic Hospitals have multiplied. Ready opportunities have made it the customary study of all, and the choice study of some, and those the best minds. Thus it has obtained its literature and its systematic teaching, and has risen to a level with the best cultivated and the best practised departments of our art.

"Now, I believe, that the acquaintance of Medical men in general with children's diseases is at present about upon a par with the knowledge they had of diseases of the eye forty years ago, and that public Hospitals will as surely supply the defect in the one case as they did in the other."

How slightly this field has yet been cultivated, and how vast its extent, is made evident by a Report of the Statistical Society. They found, in January, 1843, out of 2634 patients then in all the London Hospitals, only 136 were children under 10 years of age. Of these, 100 were surgical cases.

The returns of the deaths in 1842 show the same fact. Of 1898 deaths in the Hospitals, only 150 were children under 10, and 101 of these were violent deaths. Of the remaining 49 children, 36 only were medical cases; and of these, 26 were between 3 and 10 years old. Yet, between these ages, the deaths in 1842 were 33,748.

In less than thirty years from 1842 this annual number of deaths among children will be doubled; and yet this vast opportunity is allowed to pass by,—the rich losing the profit of the science and skill which might be obtained while relieving the sufferings of the poor.

A letter from Dr. Watson, in one pamphlet, thus expresses this fact:—

"It is a truth which ought to be confessed, that the disorders of early life are less generally understood than those that are incident to maturer age; and it is a truth which still more deserves publicity, that this imperfection of our knowledge is mainly owing to our want of Hospitals dedicated especially to the reception of Sick Children."

Dr. George Burrows also thus brings the same thing more personally before us:—

"This defect in medical education has long been felt, so that many others besides myself, anxious for a wider field of study, have at various times resorted to Paris, Vienna, and other Continental capitals, for the express purpose of attendance in their Hospitals devoted to children."

How many of our most diligent students would have acquired a knowledge of the diseases of children, if an opportunity had been offered them of doing so here. How, even in our own families, might the knowledge thus acquired have proved the means of alleviating suffering or of averting death. The Pamphlet to the Medical Profession concludes thus:—

"Each point, (namely, the rate of mortality, the few children admitted into hospitals, the success of special hospitals for children in seventeen European cities, the means they afford for instruction and extension of knowledge, the true explanation of the high rate of mortality in Paris, the reasons for admitting children between two and twelve years of age only, the benefit of the separation of some diseases, and of the convalescent from the rest, and the impossibility of making wards in the general hospitals answer well the purpose of a Children's Hospital,) has been passed in review; and if the facts which have been stated, and the arguments which have been adduced, have satisfied you that the object is one, the success of which will advance the interests alike of science and humanity, may we entreat you to lend to it the weight of your sanction, and to assist the Committee with your advice and suggestions, which will always be most gladly acknowledged and most maturely considered. Will you further interest yourself in behalf of the Institution, by making its design known in your own neighbourhood, (for which purpose you can be furnished with as many copies of the enclosed

Address as you may require,) and by receiving subscriptions in aid of its funds. Should your engagements, however, preclude you from undertaking this office, the Committee earnestly request that you will furnish them with the names of any persons likely to assist in this good work, and that you will second their application with your influence.

"We have the honour to be, Sir,
"Your obedient servants,
"PETER M. LATHAM, M.D.
"GEORGE BURROWS, M.D.
"ROBERT FERGUSON, M.D.
"H. BENCE JONES, M.D.
"CHARLES WEST. M.D."

To letters stating the necessity for and advantages of an Hospital for sick children, written by Latham, Watson, Burrows, Locock, Ferguson, Forbes, and West, little can be added by us; that little consists in an earnest wish for the advancement of our Profession, and in the expression of our hope, that where so vast a field is open, no feelings of opposition or jealousy will be allowed to deprive us of the opportunity of obtaining knowledge and skill in this hitherto neglected part of Medicine.

The Authors of this pamphlet have judged rightly in addressing it to their Medical brethren. No class possesses more private influence, or has such opportunities of bringing this subject to the knowledge of those who alone can give it support. We trust that this attempt to raise a National Medical Institution will receive the full support of the Medical Profession; and that thereby it will be apparent, how much good the union of Medical men is able to effect.

THE *LANCET'S* LAST SHIFT.

"Quid dem?"—HOR.

"Portraits of the Members of the Medical and Surgical Profession, including Biographies."
Lancet, March 23, 1850.

THOUGH we are not disposed, with the great Walpole, to believe that every man has his price, we are, nevertheless, most fully convinced that there is a reason—sound, substantial, and convincing—for every thing that *is*, however obscure it may seem, or possibly altogether be hidden from our prying curiosity. Rats do not leave the precincts of their subterranean abodes without very cogent apprehensions. Why they leave the sinking ship is clear enough. Nevertheless certain, and not less well-founded, are the motives which impel the higher orders of animals, either in their individual capacities or acting in masses, to practise stratagems in their vocations. The wily Romans, erst on a time, when beleaguered by some rough opponents, on a rumour being bruited that famine had appeared within their walls, beguiled most knowingly their besiegers by a plentiful demonstration of loaves thrown into the enemies' camp, which had the desired effect, for the siege was speedily raised. So in the game of the modern tactics of life, undercurrents are the main-springs of all our movements; but, notwithstanding, *invisibilia non decipiunt*. Some twenty or thirty years ago, merchants, and others desirous of proclaiming their occupation, were wont to attract the public eye by announcements altogether foreign to the subjects they respectively vended. Even now we are led to the price of Rowland's Kalydor, per single or family bottle, with a prefatory notice of an opinion of Samuel Johnson; or, perhaps, betrayed into the perusal of a notification where the best price may be had for old clothes, by some apophthegmatic remark of Plato or Aristotle on the dignity of human nature! In like manner, the "Silent Friend" steals upon our confidence; Dr. Culverwell discourses eloquently upon the text of "domus et placens uxor;" and he of the *Lancet*,—having found his monster advertisement fail, — (has not, it is true, yet essayed the perambulating van), — his luxuriant but extorted promises, made, like pie-crust, to be broken, all in vain,—proffers now a speaking likeness of Professional notables.

The *Lancet* is about to publish "*portraits*," "*including biographies*;" and the series is to commence with Sir Benjamin Brodie. As the portrait is to "*include the biography*" (!), we presume we shall next week be gratified with a "speaking likeness" of the Honourable Baronet. The Serjeant-Surgeon, outlined in petto, with an enormous ideal sentence issuing from his mouth, as in one of H. B.'s inimitable sketches, will, himself, enlighten us as to all the eventful incidents, from the first small-frock to the last large fee, which have diversified his bright career. Poor Sir Benjamin, to be delivered of such an offspring by so ill-featured a midwife!

It is with deep regret we see any organ of the Profession condescend to expedients so incommensurate with the true feeling and spirit of Medical science, and so remote from the dignity of the Profession. Such manœuvres are in fit accordance only with that scurvy periodical literature, which vends its pennyworth of rubbish under the attractive portrait of some Tyburn chief or Newgate gallows bird! "Alas! to what base uses may we come!" Think of a Medical Journal holding up to public admiration the portraits of the most eminent and honoured members of the Profession, as a means of increasing its languishing circulation, which the "pressure of the *times*" has so considerably reduced! "Where be your gibes, your laughter, now?" Yet, let not the Profession be terrified into giving an account of themselves, for fear of being assailed with abuse. "Please, Sir," says the man at the door, "we want some notes from you to take your master's portrait." "But what if the Doctor won't have it?" urges the other. "Why, then, let him look out for a review of his last new book, and the reports of his hospital practice—that's all!" Start not, reader! such things have been, and may be again. It is by pressure such as this that monster advertisements are sometimes concocted, promises extorted, and fictions made to bear the mask of truth. The greater the flourish of trumpets, the more tawdry and ragged the procession which follows. The more imminent the danger, the greater the effort of drowning men to catch at straws.

MEETING OF THE FELLOWS OF THE COLLEGE OF SURGEONS.

THE Fellows (by examination) of the College of Surgeons had a meeting on Monday last, for the purpose of urging upon the Council the consideration of their rights in relation to an alteration of the Charter of that College. There is reason in their arguments. They are betrayed. We cannot help thinking, however, that they have shown a large measure of simplicity in confiding in the consistency of the Council. They almost deserve decapitation for being so foolish as to hop into the springe. The Council spread their net very adroitly, and a certain number of peripatetic surgeons, whether hungering for the grains of corn enticingly placed under the net, or merely impelled by curiosity, they say not, lighted on the toils, and now they cry out because the fowlers are resolved to convert them into a pigeon-pie for the satisfaction of their new guests—the General Practitioners.

Those Fellows should remember that they purchased their honour with a full knowledge of the protest of the Members against the injustice by which they sought to profit. They accepted the honour with all its risks. They had no right or reason to believe in the permanency of the Charter of 1843. If they presumed that the Council had an exclusive power to enforce what laws they pleased, they were wrong. There is a power above Councils—that of public opinion. Besides, the College of Surgeons is the College of the Members as much as of the Council, and no laws made in violation of the rights of the former can or ought to be permanent. We think it may be received as a matter of gratulation, that the alteration of the Charter of 1843 can be effected by so trifling an injury to special interests. The deprivation of the Fellows, by examination, of their privileges is, however, an injustice for which they have to thank first the Council, and afterwards themselves. We have repeatedly deplored the subdivision of interests which the policy of the College of Surgeons has of late tended to effect. *Divide et impera* seems to be their motto; but, if the Profession take a wise course, they will seek to counteract the baneful effects of this policy by approximating, as soon as possible, to *unity* of design in the future arrangement of the Profession. Medicine and surgery are "*one and indivisible*," said Abernethy. Our Medical education ought to be one, and our rights and status ought also to be uniform throughout the empire. If there be vested interests, ancient customs, traditions, and prejudices, so strongly opposed to the realisation of this great and philosophic result that success is impossible, still let us endeavour to approach the rational standard, and establish something as a landmark for another generation.

If, in pursuit of this object, we shall tread rather heavily upon a small section of our brethren, we might regret it for their sakes, although we could not do otherwise than rejoice, that the large mass of the Profession will be brought into closer harmony, and be elevated to a more honourable position.

WHAT MUST BE DONE WITH THE SOCIETY OF APOTHECARIES?

ALTHOUGH we have not pointedly referred, of late, to the Licentiates of the Hall, and the Graduates of the Scotch and Irish Colleges, in relation to a reform of our Institutions, we have not forgotten them. We have a vivid conviction of the importance of their interests, and are perfectly sensible, that no scheme for the rearrangement of the Profession can be regarded with approbation that does not provide for

equality of rights and privileges in respect to all the variously qualified Members of the Profession in their respective departments of practice. Legal rights and Collegiate titles must merge into unity of status. If the Licentiate of the Hall desire an honorary designation, he must be prepared to concede for it his legal title; and if the hundreds of Scotch and Irish Graduates now practising as General Practitioners in this country, desire to obtain legal rights, they must help their brethren, with all their strength, to attain a more honourable status. Every effort must be made in the spirit of self-sacrifice. There can be no effective union without self-denial; and without union there can be no success.

We profoundly regret the disruption of the Profession into classes and grades, cliques and coteries. We have Physicians, Surgeons, Apothecaries, and General Practitioners, with University Graduates in all classes; we have Councilships, by election and non-election, and Fellowships, elective and by purchase;—each separating into busy little cliques, with special interests to serve, which it would require considerable political skill to anatomise. No man knows, when he essays an attempt at medical legislation, on which side of him, or in what form, an enemy may first appear. He might as well enter an Indian jungle, and expect to escape with his life. A snarl at his elbow, or a more menacing growl at his heels, would quickly dispossess him of his sense of security, and whilst, perhaps, he was feeling his way, with an excess of caution that made him half conceive himself a coward, an angry gnashing of the teeth, in most unpleasant proximity to that part of him "least capable of offering resistance," would, in an instant, complete the dishonouring conviction, It is, in truth, these minute subdivisions of interests that make medical legislation a subject of so much difficulty, and that have so long protracted a settlement of this vexed and ungrateful question.

The Society of Apothecaries has done more for the Profession than any other Institution during the thirty-five years of its existence and reign as an examining body. It has surpassed all the other bodies in usefulness. It has required from its candidates more varied attainments and a higher standard of education, and by enjoining more regular courses of study, has engendered in the pupils more orderly habits of application. With the latter came a love of science, and higher purity of morals; and we are satisfied that the improved respectability and superior professional knowledge of the General Practitioners of the present day are almost wholly attributable to the exertions of the Apothecaries' Society. This is high praise, but they deserve it. We give to all men and Institutions their just meed. If the powers of the Apothecaries' Society were to be abrogated to-morrow, in accordance with the expressed consent of the Court, we should say of them, that none have lived more worthily, or died with better grace.

But die they must; they cannot help themselves, and no rational man will help them. They have already outlived their mission. They have recently, it is true, made a noble effort still further to improve Medical education; and this last act demonstrates the propriety of the control of the education of the General Practitioners being in the hands of members of their own class. We thank them for it; but we do not forget, that they are wholly unable to carry out the provisions of their own Act, which, so far as they are concerned, is a dead letter. Their exchequer is dried up, and new candidates will not replenish it; for, by the Society's own admissions of incapacity, they have robbed their Act of its terrors. It is the interest of the unlicensed Practitioner that they should remain incapable.

Their name is an offence, their pursuits are a dishonour to the dignity of science. The *title* of APOTHECARY must be erased from the Statute-Book, and the Profession must be no longer scandalised by being associated with a *trading body*.

In other respects the powers possessed by the Society must be carefully guarded, and be on no account surrendered for the sake of any chimerical scheme that may be propounded by adverse parties. The protective powers contained in that Act constitute it one of the pillars of Medical legislation; and if the College of Surgeons, or any other body, venture to tamper with it, they will soon discover their error. It will not be so easy to abolish the Society of Apothecaries as it has been boasted, unless, in good faith, every tittle of its advantages be guaranteed to the General Practitioners.

THE ASYLUM FOR IDIOTS.

TWO-AND-TWENTY YEARS ago an experiment, fraught with the greatest consequences to science and humanity, was commenced in the hospital at Biçêtre by Dr. Ferries, the principal physician of that Institution. It was an attempt to restore to intelligence and society a class of human beings too long considered as utterly incapable of experiencing benefit from any means which might be adopted for their improvement. The idiot in every age and in every country had been left to perish in what was considered his hopeless condition. Science had stretched forth her hand to help the insane, but she had done nothing for the imbecile, because she had no hope of her efforts being crowned with success. The Physician of Biçêtre resolved to try whether the long-cherished opinion, that idiots were incapable of improvement, was founded on truth. With a few of the more intelligent patients he commenced his task, which was attended with so much success that, ten years afterwards, a school was formed for them, under the superintendence of Dr. Voisin. The great problem was solved in favour of humanity; and, since that time, increased efforts have been made on behalf of idiots, and increased success has been the happy consequence.

In Switzerland, Dr. Guggenbühl, encouraged by what had been accomplished in France, resolved to make an effort on behalf of the Cretins. The sight of an old man stammering a half-forgotten prayer, before an image of the Virgin at Seedorf, in the canton of Uri, urged him at once to his benevolent work. Success has been his reward; and stimulated by these instances, men of science and benevolence in Europe and America have established institutions for the treatment of imbeciles.

In our own country, three years ago, an Asylum for Idiots was first projected; and it is with the highest satisfaction we are enabled to state, is now receiving such support as promises to render it one of the most important and valuable institutions in the land. Its third anniversary dinner was held on Tuesday last, at the London Tavern. On that occasion His Royal Highness the Duke of Cambridge presided, and the large assembly of scientific and benevolent gentlemen testified to the interest which this Institution has excited. The statements made by the various speakers show how valuable it has already proved; and yet, how inadequate to meet the wants of our country. Already, the applications for admittance have far exceeded the means of accommodation, and the Committee has, with a noble philanthropy, resolved to erect new buildings capable of receiving a much larger number of patients. In the room, on Tuesday evening, upwards of 2600*l.* were subscribed to the Institution, and amongst the number of benefactors, we are proud to place the names of our beloved Sovereign and of His Royal Highness the Prince of Wales. During the evening, the health of the Medical officers of the Asylum was drunk, and a high compliment paid to the Medical Profession by the distinguished Chairman. We felt gratified on noticing the mark of respect which the company paid to our Professional brethren; and the speech of Dr. Conolly, detailing the condition of some idiots who had come under his own observation, and had experienced benefit from his treatment, was listened to with profound attention. We wish success to the Institution, which cannot fail to be an ornament to our country, and a boon to science and humanity.

NATIONAL MEDICAL ANNUITY AND RELIEF FUND SOCIETY.

On Saturday, the 23rd instant, the second meeting of the Provisional Committee of this Society was held at the Freemasons' Tavern, when between sixty and seventy members of the Profession assembled. Among the gentlemen present, we noticed Dr. Forbes, Dr. Tweedie, Dr. Risdon Bennett, Dr. Bushnan, Dr. Sieveking, Dr. Gardner, Dr. W. Merriman; Messrs. Squibb, Davies, Propert, Headland, Hancock, B. Curling, Hunt, Wickham, of Winchester, &c., &c.

Dr. Forbes having been requested to take the chair, expressed his thanks for the honour conferred on him, and his earnest desire to serve the Society,—a Society which he was sure would eventually be of great importance. He was confident, that in process of time it would acquire a reputation and estimation which would render it creditable to any one to have had anything to do with its formation. This meeting was the second to which the Provisional Committee had been summoned. At the meeting on the 26th of November, when the Society formed by Mr. Daniell was abandoned, the Provisional Committee was then instituted, with power to add to their numbers. They had accordingly made application to a great many Medical men, a large number of whom had signified their consent to join the Committee. They had a list of 270 names, and the first business to be transacted was the formal admission of these gentlemen. Dr. Forbes then read the first resolution:—

"That the gentlemen invited to become members of the Provisional Committee, be admitted such."

It was carried unanimously; and all present were declared by the Chairman to be members of the Committee.

Prior to reading the Report of the Sub-Committee,

Dr. Forbes stated, that the Society had originated in a most earnest desire to benefit the Profession. The Committee of Management had been most earnest in their endeavours to bring the Society into such a state as to be worthy their approval. It was founded on the great principle of mutual co-operation—the poor being aided by the wealthy—the sick by those in health. The means by which these objects were to be carried out were—1st. By establishing a Provident Society, so that individuals by subscribing small sums annually, might claim a certain sum in times of sickness, whether temporary or permanent, by which they were rendered incapable of pursuing their Profession; another plan was the Institution of deferred annuities, members paying a small annual subscription being entitled to an annuity, sufficient for their maintenance, at the age of fifty and upwards: a third, annuities for widows and orphans on the decease of the subscriber,—to be paid to the children, until the sons were of age, and the daughters married. The subcribers, therefore, would have the satisfaction to know, that if their circumstances placed them in a position to render such advantages unnecessary to themselves, they would, at all events, be contributing to the necessities of their less fortunate brethren, and that, too, by a very trifling sacrifice, scarcely exceeding 1s. or 2s. a week. The last feature in the scheme is a purely charitable branch—a necessary complement to the plan; for, however admirably a mutual Provident Society may be formed, it cannot be adapted to meet every contingency. The benefits of the last-named are to be exclusively confined to members and to their near relatives. It is intended to relieve many cases which the other parts of the scheme cannot meet; but, as it applies solely to members, it must still be looked upon as a reward for provident actions.

The report of the Sub-committee was then read. It stated, that the sum of 423*l.* 8s. had been paid to the Managing Committee by Dr. Robertson, the Treasurer to the late Society, which, with the sum of 5*l.* 6s. 2d. in the hands of Mr. Daniell, constituted the entire balance belonging to that Society, after payment of all debts. 14*l.* 11s. 5d. had since been spent in postages and other working expenses. Mr. T. Hawtayne, who had long been interested in these matters, and whose services were highly eulogised in the Report, was next appointed Honorary Secretary; and apartments engaged at 52, Regent-street, for the offices of the Society, at a rental of 1*l.* weekly.

The first point recommended in the Report was that no one should be permitted to subscribe for annuities, sickness fund, &c., unless he were a member. The annual subscription of a member to be 1*l.* 1s., or 10*l.* 10s. paid in one sum to constitute life-membership. The subscribers to the former Society who have paid 10*l.* 10s. to be at once admitted as life-members of this, while those who have paid a less sum, say 3*l.* 3s. or 5*l.* 5s., to be admitted as such on paying the difference. In order that their calculations and arrangements might be as correct as possible respecting the annuities, &c., Mr. Neison, the Actuary, had been consulted, and the plans had been drawn up in accordance with his suggestions. The branch for deferred annuities to be so arranged, that members can secure for themselves annuities, to commence at any time from fifty to seventy years of age, or for their widows and orphans, to commence immediately on the decease of the subscriber, the widow forfeiting half her annuity if she marry again, and the annuities for the sons to cease on their coming of age, for the daughters when they marry. The deferred annuities may extend from 10*l.* to 100*l.* per annum, commencing at any stipulated age between fifty and seventy; but if the subscriber be incapacitated by permanent illness, prior to the date agreed on, he may at once commence with a proportionately reduced annuity. A subscriber aged twenty-five, paying annually 3*l.* 3s. 5d., will at fifty be entitled to 50*l.* per annum, and the same for one of thirty-five, paying 5*l.* 14s. per annum. Family annuities, to be granted to all the children conjointly, are terminable when all the sons are of age, and all the daughters married. With respect to the sickness fund, a member aged thirty, paying 1*l.* 15s. 11d. annually, will be entitled to receive 50*l.* a-year, when incapacitated by illness, such an annuity to cease on his reaching the age of seventy. The Actuary advised that plan, as at that age it would be difficult to distinguish between sickness and infirmity; but the subscriber can avoid the mischance of being left, at that advanced age, without his annuity, by the additional yearly payment of 2*l.* 3s. 8d., by which he can secure a deferred annuity to the same amount to commence at that age. The Relief or Benevolent Fund is to be constituted by the annual subscriptions of members, by donations, bequests, &c.; it will be employed in making advances for subscribers for annuities unable to carry on their payments in consequence of illness, &c.; in donations to members reduced by sickness, &c.; in affording relief to widows and orphans, and in augmenting their annuities, when clearly inadequate to their necessities; in making loans to members at little or no interest; and, lastly, to aid, if possible, in building cottages for decayed members.

Deferred annuities may be subscribed for as soon as the Society is enrolled; a certain number of names—250—must be entered in a register kept for that purpose, before reversionary annuities can be granted; and 200 names, before any can be entered as subscribers for the Sick Fund. The tables were said to be highly favourable to the subscribers, but, at the same time, so constructed, that, if the Society were at any time to be broken up, the interests of the members would be secured by transferring the business to some of the old-established societies. The subscribers for the Sickness Fund must be in good health at the time of joining, or consent to pay an additional premium proportionate to the state of their health.

The Report further recommended, that the Board of Directors should consist of not less than twelve, nor more than fifteen, one-third to retire annually. If the present Managing Committee be re-appointed, they proposed to draw up a body of Rules and Regulations to be submitted to the Profession. It concluded by recommending, for the sake of brevity, that the name be changed to "The British Medical Fund; a Provident and Relief Society for Medical Men, their Widows and Orphans."

Dr. Tweedie moved the adoption of the Report. He remarked, that the advantages of the Society had been so well explained by the Chairman, as to render it unnecessary for him to detain the meeting. He trusted soon to see the Society established on a permanent basis.

Dr. Sieveking seconded the proposition. He thought it would be a pleasure, and the duty of every member of the Profession, to support the Society. The names of the Managing Committee and of the Actuary were a guarantee that the proposals were based on the most liberal footing. A peculiar feature in this Society is the starting with money in hand. It is encouraging to those who intend to support it.

The report was then received and adopted.

Mr. Curling proposed—

"That a detailed plan be drawn up from the Report, be prepared, printed, and sent to the Members of the Profession at large, and the names of the Provisional and Managing Committee be transmitted with the same."

He had great pleasure in proposing such a resolution, as it was clear the plan must require careful consideration, which can only be given to it by Medical men, after the plan has been printed and circulated among them.

Mr. Lord seconded the resolution, which was carried unanimously.

Mr. Wickham, of Winchester, said, he had a proposition to bring forwards, which he was sure there would be no hesitation in adopting, after hearing the excellent Report furnished by the Managing Committee. The resolution was to the following effect:—To request the Managing Committee to continue their labours, and to give them full discretional powers in the application of the present funds, and on all other matters, as well as to take whatever steps may be necessary to establish the Society; and that they be empowered to fill up any vacancies that may occur in their own body."

Dr. Woodfall, in seconding the resolution, said, it was almost needless to ask the question; as no one but those who had hitherto managed so well, could carry out the undertaking so much to their advantage.

Carried unanimously.

Dr. Forbes commended the admirable manner in which his colleagues of the Managing Committee had executed the task committed to their hands. They had met once or twice every week since they were appointed, sitting for two or three hours each time, and have taken a vast deal of pains to work out the scheme. They felt it required a great deal of consideration, and they gave it. He would say this, now that the Provisional Committee had been pleased to reinstate them in their functions, he was sure they would proceed in the same manner in the performance of their duties. He never knew any Committee work better. Differences of opinion, of course, there were; but that was an advantage, as it served to elicit the best manner of proceeding They had gone on harmoniously, and he had no doubt they would continue to do so.

Mr. Leet then proposed, and Mr. Doubleday seconded, in accordance with the recommendation of the Committee—

"That the name of the Society be changed to the British Medical Fund, a Provident and Relief Society for Medical Men, their Widows and Orphans."

Mr. Daniell remarked, that when he first established the Society at Sheffield, the name was given to it of the General Medical Annuity Fund; but, in consequence of some objections being made to that, the word "Society" was ultimately added. The word "Fund" did not mean, nor did it indicate, that it was a Society. He thought the same objection would apply to the proposed name, and wished to add the word "Society" to it. He did not make the objection from an unfriendly spirit. Although on the Committee, he had not been able to attend its meetings, on account of his residence in the country; but all their proceedings met with his hearty concurrence, and he warmly praised the talent and ability that had been displayed.

Dr. Forbes said there was ample authority for using the word "Fund" in the sense they had done. It was a common word to use for Societies granting deferred annuities, &c. In India there were the Military and Military Medical Funds, and in England there was a very excellent Society, the Royal Literary Fund, for giving relief to literary men, whether members or not.

The resolution was carried.

Dr. Bushnan wished to ask a question, not with any desire to throw impediments in their way, but to gain information. He did not understand what was to be done with the funds in hand; were they to be employed in forming the Society? He thought it would be better to apply to the Profession for a small subscription to effect that purpose, than to use money advanced for another object.

Dr. Forbes, in reply, referred to the proceedings of the meeting of the 26th November, when the members of the old Society, almost unanimously—with two exceptions—agreed to the transference of the funds to the present Society, giving them full authority to use them as they thought proper. The Managing Committee, therefore, felt themselves justified in using them for the purpose named—that being, in fact, the best way in which they could be used, to build up the Society in the safest and the firmest manner.

Dr. Bushnan did not mean to throw any doubt on the gentlemen to whom the management had been entrusted; they had his fullest confidence. He would be happy to support them to the utmost of his power. (Cheers.)

Mr. Daniell remarked that the gentlemen who had furnished these funds continued in the Society, and would derive the full benefit of their subscriptions.

Dr. R. Bennett, as a member of the Committee, said they had been anxious to obtain the sense of the meeting as to the plan laid before them, but they had not heard any objection raised, nor suggestion made. It appeared to have met with their fullest concurrence. If any member, however, had any suggestion to make, it would be as well to bring it forward at once, that it might be fully considered. It would be advisable to make the scheme as perfect as possible, before it was brought under the notice of the Profession.

Mr. Wickham then proposed a vote of thanks to the Managing Committee.

Mr. Bullen, of Ipswich, seconded the proposal, and said, the best compliment that could be paid had been made to the Committee, in the fact that there had been no debate on their proposal, notwithstanding the many complicated questions involved. They had all been carried unanimously.

The vote was agreed to unanimously.

Mr. Squibbs having returned thanks, Dr. Bushnan proposed a vote of thanks to Dr. Forbes for his conduct in the Chair, which being carried by acclamation,

Dr. Forbes briefly returned thanks, and the meeting separated.

[We are compelled to defer publishing the Report of the above Institution until our next, when it will appear *in extenso* with our Editorial remarks.—Ed. *Med. Times.*]

MEDICAL REFORM.

To the Right Honourable Sir George Grey, Bart., M.P., Her Majesty's Principal Secretary of State for the Home Department:—

The Memorial of the undersigned Members of the Royal College of Surgeons of England, residing in the County of Essex:—

SHEWETH,—That your Memorialists are Members of the Royal College of Surgeons of England, having been admitted thereto in compliance with its laws, *i. e.*, by following its prescribed curriculum of study, by undergoing its examination, and by payment of its fees.

That up to the year 1843, but *one* class of Members existed in that College, all of whom were admitted upon the same terms, and were entitled to the same privileges. That in that year, the Council of the College surreptitiously (in so far as the Members were concerned) obtained the grant of a new Charter, by which certain of the Members were separated from the rest by the title of "Fellows" without any additional examination or the exhibition of any superior fitness for, or talent in, the exercise of the Profession, by which act your Memorialist feel, that every then-existing Member who was excepted from that arrangement suffered a grievous wrong and injustice.

That proof of the unsatisfactory nature of this arrangement is furnished by the fact, that at this very time the Council of the College are applying for an amendment of this very Charter, and in order to quiet those of their Members who are thus injured, propose to "sell" them the "Fellowship" for "Ten Guineas;" but, to reserve to those of their number who practice "Surgery" alone, all the Offices in the College.

These proposals, your Memorialists look upon as "insult added to injury." They submit, that *every* Member of the College is entitled to equal *rights, privileges,* and *titles,* since all were admitted upon equal footing as regards duration of study, strictness of examination, and payment of fees.

Your Memorialists beg, therefore, respectfully to urge:—

1. That no further legislation in respect of the College be permitted, until the views of its 12,000 Members be ascertained, in respect thereof, and that the Council be not allowed any undue influence therein.

2. That the Legislature withhold its sanction from the establishment of any new Medical or Surgical College, or Corporation whatsoever.

3. That the Royal College of Surgeons is sufficient for all the purposes of the regulation of the Profession in this part of the United Kingdom, and that it be re-modelled to render it efficient.

4. That the Members of the College have a voice in the election of its Officers, as well as in its general management.

5. That the sale of Medical titles and honours, be strictly prohibited in all Colleges and Universities in the United Kingdom.

6. That there exist but one standard of Surgical qualification, and that *it* be made uniform throughout the Kingdom.

SOCIETY FOR RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN IN LONDON AND ITS VICINITY.—We beg to direct the attention of our readers to the advertisement announcing, that the Annual Dinner of this Society will take place at the Freemasons' Tavern on Saturday, April 6. This Society has strong claims on the attention of every member of the Profession.

REVIEWS.

Pathological and Practical Observations on Strictures, and some other Diseases of the Urinary Organs. By FRANCIS RYND, Esq., A.M., M.R.I.A., Fellow and Member of the Royal College of Surgeons in Ireland, &c., &c. London: Longman and Co. 1849. 8vo. pp. 195.

We have been much pleased with the perusal of this work; it is full of sound practical research, and contains much that will prove valuable to the surgeon.

After some preliminary remarks on the interest attaching to diseases of the urinary passages, and on the structure and situation of the urethra, the Author broaches the opinion, that gonorrhœa is unjustly accused of being a cause of stricture. The idea is not new, but has never been very favourably received. It may be difficult to trace a case directly home to it—but we certainly cannot fancy any more likely cause; while the fact that many contract gonorrhœa who escape stricture proves nothing.

That injuries inflicted by the catheter are a very sure and constant cause of stricture we can readily believe; "every lesion of surface must be repaired by a cicatrix, and if this is in the slightest degree elevated, the foundation of a stricture will be laid."

Organic strictures are arranged under the following heads:—

"The simple circular, or, according to some practitioners, the packthread stricture, (so called because it creates an appearance as if a portion of the urethra in which it is situated had been partially closed by a ligature of fine thread or twine,) is thin, and apparently formed by a single duplicature of the mucous membrane; but this appearance is deceptive, for on closer examination it is found harder and firmer than it possibly could be consistently with the idea of so simple a mode of formation. This rigidity extends to some small distance from the contracted centre in both directions, insomuch that when there are two or more strictures, the intermediate portions of the canal are made to assume somewhat of a fusiform appearance, and is probably produced by an effusion of lymph, the result of some chronic inflammation; but what the original cause of such inflammation may have been it is impossible to say, unless some of the explanations already hazarded be accepted. The existence of this lymph should never be forgotten by practical surgeons, and particularly by those who speak familiarly of tearing through a stricture, or otherwise dealing violently with it, as though it was an unresisting fold of membrane: it is occasionally so firm as to resist any force that could be reasonably employed, and offers a ready explanation of the frequent formation of false passages, for a catheter or bougie will take any part of the healthy urethra more easily than through it. Occasionally, this stricture is only partial, and occupies but a portion of the circumference of the canal, in which case but a minor degree of inconvenience ought to be experienced; this observation, however, being founded on mechanical principle, ought to be received with great caution, for it will be shown hereafter, that the sufferings caused by this disease, and even the danger attendant on it, may not always be measured by the quantity of organic change present. The usual position of the circular or packthread stricture is at the membranous portion of the urethra.

"2. The banded or *bridal* stricture is when one or more firm and resisting cords or fibrils pass across the canal, leaving a passage for the urine at either side, and between them: this must be of exceedingly unfrequent occurrence, for it is rare to meet a specimen amongst our pathological collections, and probably will be equally difficult of recognition during life. Its formation can only be explained, by supposing that the urethra had been wounded or ulcerated, and an adhesion attempted between its opposite sides, which, yielding to the force of the stream of urine, became at length extended into a fibrilla or band. Accordingly, not originating in any pathological peculiarity of the urethra itself, it observes no particular locality, and may be found in any part of it; the few that have come under my observation were either situated at the bulb, or within an inch or two of the external orifice.

"3. The irregular stricture is where the wall of the urethra is converted into a hard substance, almost possessing the firmness of cartilage or ligament, for perhaps an inch or two of its longitudinal extent; the diameter of the canal being thus diminished, and its course turned in different directions. The quantity of surrounding hardness is not the same in every part, and consequently the canal is unequally diminished, and hence becomes so devious and winding, as to render the guidance of an instrument through it very difficult, quite independent of the obstruction offered by the diminution of its size. In considering the pathology of this case, a question naturally arises, Does it originate in this form, and is it the lengthened and extensive mass of disease from the very commencement, or is it a succession, or rather an aggregation of strictures that were developed at different times? Without presuming to answer this question too confidently, it may be observed, that it is most frequently met with in old cases; in men that have suffered long and severely, been treated by different practitioners, and had rough usage from instruments; and that it usually implicates the bulb in some one part or other of its extent, the very spot most likely to be injured by awkwardness or inattention. Under such circumstances, it is not unfair to hazard a conjecture, that in any urethra that has sustained sufficient injury to cause a cicatrix, such a condition of the part may be ultimately established, for every successive introduction of an instrument may cause new mischief; and as the difficulty of passing it increases, so will the violence used be of more frequent occurrence and severer in degree until the number and firmness of the cicatrices impart to that portion of the canal a new character and a new appearance."

The stricture being established, other evils are likely to follow. Thus we find the urethra dilating into a pouch or sac behind the stricture, by a mechanical effect produced by the efforts of the bladder to expel the urine. This sac, in some cases, ulcerates and allows the escape of urine into the perinæum; sometimes the urine escapes slowly, and makes its way to the surface, in which case there is probably an effort of nature to make a new opening for itself; lymph is thrown out, which prevents the urine escaping into the cellular tissue, which it does when the sac is ruptured by the force of the stream, probably at an ulcerated part, and rapidly diffuses itself, giving rise to a fearful amount of sloughing, under which the patient may sink; in the milder case, where there is a sort of new channel formed, an abscess collects near the surface, and breaks, forming fistula in perineo. When an abscess is formed as the result of injury, it is extensive and diffused, not having the protection of a deposit of lymph to protect the escape of urine, as in the case we have just alluded to. Hence these accidents become very dangerous from the extensive sloughing of the cellular tissue which necessarily follows. Abscesses form in the perineum, which, if left to themselves, make their way into the urethra in some cases, and then the urine, finding its way into the cavity of the abscess, causes fresh inflammatory action, which ultimately leads to the formation of fistula in the same manner as if the primary lesion was in the urethra; hence the practical inference, that these abscesses should be opened, to prevent the communication with the urethra taking place. "All collections in the perineum, of whatsoever nature, must experience delay and difficulty in their approach to the surface; the fascia there is dense, and firm, and resisting, and a long time will elapse ere it gives way, whilst there is no impediment offered, in the direction of the urethra, to prevent its bursting there." We gather from Mr. Rynd, that gonorrhœa is sometimes a cause of these abscesses; they may commence in the form of a number of small indolent tumours, or as a single kernel-like hardness in the perineum. Surgeons are very often too late in making their incisions into these abscesses, and then are often blamed for making an opening into the urethra with their lancet, which opening, however, was made by the abscess pointing that way, and which it is the object of an early incision to prevent. In old and broken-down

constitutions, if these fistulous openings are made the subject of operation, they are very unpromising; "the wounds do not heal,—they remain open, large, and flabby, discharging a prodigious quantity of matter, and rendering the patient's state infinitely worse than it had previously been." After alluding to Sir Everard Home's opinion of stricture being at times a secondary affection, arising from diseased prostate, but from which the Author dissents, he proceeds to show the effect produced on the bladder by stricture. We have hypertrophy, resulting from the efforts to overcome the obstruction; this causes a diminution in the capacity of the bladder, besides which, it becomes so irritable, that the calls to void the urine are more frequent and very distressing. We believe, that the distress arising from this and some other diseases of the urinary organs, not unfrequently causes such nervous excitement, that, in despair, suicide is attempted. Hypertrophy does not result in every case; nor is irritable bladder the only mischief to be looked for. We find the veins about the neck of the bladder and of the prostate becoming varicose, and liable to pour out large quantities of blood, the flow of which cannot be easily stopped. This state of the veins must constantly be borne in mind when operating on elderly patients; it is this state that renders puncture through the perineum the least promising of the methods in use for relieving retention of urine. Attention is directed to another pathological change that occurs at times, but fortunately not often; "when the flow of the urine is retarded or stopped, the bladder (as has been stated) contracts and strains violently to overcome the impediment, and, under such efforts, it is possible that a small portion of its mucous coat may be pushed out between some of the muscular fibres, and thus a pouch, or bag, be formed, consisting of a true hernia, or protrusion of the mucous membrane: this is the sacculated bladder; and the gradual enlargement of the sac may be as easily understood as its original formation."

In addition to all these evils, the kidneys, and other parts, may become diseased.

Mr. Rynd does not think that rupture of the bladder ever occurs as a consequence of mere mechanical over-distension by urine. Rupture of the bladder, arising from external violence, is found to take place most frequently where it is covered with peritoneum. The result, of course, is the escape of the urine into the peritoneal cavity, recovery from which, though possible, is rarely to be expected.

After directing attention to the difference between inflammatory fever caused by some irritation, such as extravasation of urine, and urinary fever, the symptoms of which are faithfully described, and which the Author shows the danger of mistaking for any other form of fever, as, for example, ague, which, he says, has happened "probably by reason of the febrile paroxysm;" and he further tells us that two cases of aged gentlemen have come within his own knowledge, who were plentifully dosed with quinine unto the death, the real complaint from which they suffered being dysuria from hæmorrhage into the bladder. In cases of this description, besides the other symptoms, the catheter may often serve as a valuable means of diagnosis.

In treating of retention of urine, the aid to be obtained from bleeding, warm baths, muriated tincture of iron, enemata, but, above all, from opium, where there is difficulty in passing the catheter, is clearly laid down.

Mr. Rynd deprecates forcing the catheter, which has been done successfully, but which, of course, is a very hazardous proceeding; but where the patient must die if not relieved, it is, at all events, a proceeding which may at times be resorted to.

In reference to puncture of the bladder, Mr. Rynd, and other Irish surgeons, generally perform the operation above the pubis. There are, however, certain objections to this course; it is difficult if the patient is fat or the bladder contracted, and, as Mr. Rynd justly says, the great drawback is, "the difficulty of preventing the escape of urine subsequently from the wounded bladder, and of procuring an easy channel for its removal from the parts in which it rests." Our readers are aware, that after the bladder has been punctured in this situation, the canula is left in, or, rather, a flexible catheter, as nearly the size of the canula as possible, is pushed through it into the bladder, and the latter withdrawn. In this country preference is given to the puncture from the rectum, about which there is not much difficulty nor very great danger.

Our Author discusses the merits of the various modes of treatment for the cure of stricture; he points out the danger attending the treatment with caustic injudiciously employed; the chief value of cauterization, indeed, consists in the allaying of irritability, and which may be effected by nitrate of silver. Dupuytren's method, by vital dilatation, viz., the passing down an instrument to the stricture, and retaining it there as long as it can be borne, slightly twisting it round, or pressing it onwards, from time to time, until at length it surmounts the obstruction, is favourably spoken of. "The vital effect is shown in the dilatation of the urethra to such an extent, that, the canal, which at first would not admit the smallest instrument, at the end of a few hours, or at most of a few days, easily receives one of considerable size." This line of treatment occasionally succeeds, and occasionally fails entirely; without succeeding entirely, it sometimes is a valuable step towards effecting a cure by dilatation; so that Dupuytren's method of vital dilatation may be used always as a preparatory step. We are reminded by the Author, that, in speaking of dilatation of a stricture, we are to recollect, that "it is surrounded by lymph, and, therefore, though never so limited, is more or less firm and resisting; it admits not of being expanded, like a yielding substance, and, consequently, what is meant by dilatation is the promotion of the gradual absorption of lymph."

There is nothing very novel in the treatment proposed by Mr. Rynd; still it is throughout judicious, and quite in accordance with the most approved methods of the present day. He concludes his work with a chapter on affections of the prostate gland, which may be read with advantage.

REPORTS OF SOCIETIES.

WESTMINSTER MEDICAL SOCIETY.

MARCH 9, 1850.

Dr. MURPHY, President, in the Chair.

DEATH FROM HÆMORRHAGE INTO THE BLADDER.

Dr. Wardell exhibited to the Society a pathological specimen, consisting of a diseased bladder, with left ureter and kidney attached. He stated, that he was recently requested by Dr. Browning Smith, of Kensington, to make an examination of the body of a man, the cause of whose death was obscure. The history of the case was as follows:—George Emmerton, a farm-labourer, 73 years of age, of middle stature, and well-developed muscular system for his time of life, but pale and sunken in the features, complained, on the 26th of January, of frequent desire to micturate, which was always attended with considerable pain, and only a few drops passed, these being chiefly of blood. There were great distension and dulness on percussion at the inferior part of the abdomen. No fluctuation perceptible. Catheter passed without difficulty, and, on entering the bladder, it felt as if penetrating a loose and easily lacerable coagulum, or a thick viscid substance. No fluid escaped, except a little blood. Pulse *80, weak, and* compressible. Lips pale; tongue blanched, and loaded with a pasty coat. Complained of no pain when quiescent. Ordered dose of castor oil, to be placed in a hip-bath for twenty minutes, and to have an anodyne draught. It was stated, that, in March last, the deceased had received a violent blow over left hypogastric region by running forcibly against the corner of a low door; this, at the time, caused considerable pain, which soon passed off. For some months past he did not pursue his ordinary avocations, in consequence of general and increasing debility. During the six weeks previous to his decease the urine was mixed with varying quantities of blood, which increased in quantity for the last ten days of his life. The patient sought no medical advice previous to calling in Dr. Smith, on the 26th. Three weeks before his death, he had been an inmate of the Middlesex Hospital, for hydrocele. He was tapped for that affection, and speedily recovered. On the morning of the 27th, the catheter was again passed, and it still seemed to pass through some substance offering a slight resistance. Some fluid dribbled away, consisting of blood and urine. Complained of no pain, nor desire to micturate. Pulse weaker, and general symptoms of more alarming character. Took, every three hours, doses of lead, opium, and acetic acid. In the evening he was much in the same state. The following morning (28th) he was reported to have slept continuously during the night. Bowels had been freely opened. Pulse smaller and quicker. Towards morning he had a fit, apparently of an epileptic character. During the day he had several fits of a similar nature, and in most of these the facial twitchings were very considerable. The *post-mortem* inspection was made fifty hours after death. Surface considerably blanched. Not any signs of general emaciation. Pulmonary pleura, on both sides, was extensively adherent by firmly organized bands of lymph to the lungs. With the exception of emphysema at the anterior parts of the organs, their parenchymatous structure presented no marks of disease. Heart large; left ventricle, two lines thicker than ordinary; right ventricle, capacious, wall attenuated, and its external surface partially covered by a thin layer of fat. On close examination, adipose matter did not insensibly blend with the muscular tissue, as is the case in fatty degeneration of that organ. Edges of each aortic valve thickened by calcareous deposit. Other valves healthy. The bladder was enormously distended, and its color of a dark, pinkish hue, evidently imparted by its contents. On introducing the catheter no fluid passed, consequently a puncture was made high up in the lateral aspect of the organ, when a pint of clear urine was removed. Another pint of fluid was thus taken away, but this partly consisted of blood. Other four-and-a-half pints of blood, part fluid, and part in dark easily broken coagula were removed. Carefully introducing the hand, a soft irregular roughened surface was felt extending over a considerable space on the left side, and near the sphincter vesicæ. Thus examined in situ, a small orifice, admitting the little finger, could be felt, opening into a cavity, apparently of sufficient size to admit a small orange. On slight pressure, two or three ounces of blood flowed from this orifice. By turning the viscera aside both ureters were brought into view. The left was tensely distended, and nearly as thick as the little finger; a small slit was made near its union with the kidney, and the contained fluid was found to consist of limpid urine. A gum catheter was straightened and made without any obstruction to pass out at the uretral orifice into the bladder. Right ureter not at all distended. The bladder was then removed, and on being freely laid open, extensive disease was manifest, consisting of considerable thickening, at some places to the extent of seven or eight lines, and presenting an ulcerated surface, not covered with much purulent matter. On manipulation no very notable hardness was felt; but there was induration in some parts. The sacculated cavity spoken of was found to have a lining membrane possessing all the characteristics of the bladder, when in a healthy condition. Prostate gland healthy. On careful examination of diseased mass, no bleeding orifices could be traced. The left kidney was much smaller than the right. On being cut open its pelvis was distended with clear urine. The calices and infundibula were considerably dilated. Cortical and tubular substance greatly absorbed. Papillæ ill-defined. Right kidney perfectly healthy and of the normal size. Dr. Wardell then said, he had, for the sake of brevity, contented himself with giving a short history of the case, and a concise description of the *post-mortem* appearances; he would, however, offer a few remarks on the chief points associated with this interesting specimen. He observed that, on first exa-

mining the morbid product, from the considerable thickening of the bladder at the seat of ulceration, the blueish-red roughened surface, the induration felt in several places, the streaks of purulent matter, and other features, in no slight degree simulating carcinoma,—it was not unreasonable to deem it a true instance of ulceration of the viscus. There were certain negative facts opposing such opinion,—especially the unaccompaniment of general cachexia, the absence of pain throughout the progress of the complaint, the healthy condition of the adjacent organs, some of which are almost invariably cancerous when carcinoma of the bladder exists, especially the rectum, the prostate gland, and vesiculæ seminales in males, and uterus in females. Sometimes the sub-mucous tissue of the vesical parietes at the fundus, or near the neck, was the first seat of the malignant change, and the neighbouring organs were found of normal character; but such instances are very rare, and constituted mere exceptions to a general rule. The next particular was the orifice and cavity spoken of in the account of the *post-mortem*. On laying it open, the lining membrane of this sacculated pouch was found quite healthy. A condition of the viscus resembling the one now seen on the table, had by some authors been termed vesical hernia; by others a diverticulum. A diverticulum might be congenital, or the result of disease. The manner in which this had been formed was undoubtedly by disease—by the apposition and ultimate union of the ulcerated edges, which had gathered up a fold of the vesical wall, and the orifice had been kept patulous by the passage of the urine to and from the bladder. On placing portions of the diseased mass under the microscope, none of the caudate, nucleated cells, so indicative, or it might be said, so truly pathognomonic of carcinoma, could be detected; and Mr. Bowman, of King's College, who had minutely examined the product, could not detect the true cancerous cells. Dr. Wardell, therefore, considered the specimen as simple hypertrophous ulceration, where the thickening from long-continued disease had become considerable. With regard to the extent of hæmorrhage, a good illustration was observed, in the fact, that it may be very great in the visceral organs, where only very minute vessels were the orifices of the sanguineous effusion. In the specimen before the Society, a large quantity of blood had been poured out from very inconsiderable vessels, as, on careful examination, it was found, that none of the larger branches had been eroded. There was another circumstance worthy of note—viz., the appearance of the left kidney, which from the regurgitation of the urine into the pelvis, had, by the continuous pressure, caused great alteration in its appearance.

Dr. Lankester said, the pathological case in question negatively tended to confirm what he had said, on a previous occasion, with regard to the diagnosis of malignant affections of the bladder, viz., that the non-existence of caudate cells showed the disease to be simple ulceration. Mr. Haynes Walton's case, mentioned at a previous meeting, did not invalidate his views as to the value of the microscope, in forming the diagnosis of malignant disease of the bladder.

FŒTAL MONSTROSITY.

Mr. Canton exhibited a specimen of fœtal monstrosity in which, from absence of the anterior abdominal paries, eventration of the viscera had occurred. The fœtus was born at the ninth month, and presented, besides the above peculiarity, a spina bifida as large as its head. Mr. Canton observed that he was induced to bring the case before the Fellows of the Society, from having recently had the opportunity of dissecting a similar specimen; and he thought that the details of the examination might be interesting in connexion with the circumstance of his being able to show a parallel example of these abnormalities in their complete condition. The head, neck, upper extremities, and chest, were perfect; the pelvis and lower limbs were deformed, and there was no trace of anal aperture or external generative organs. The abdominal viscera projected from their proper cavity, and were contained in a thin membranous sac, which was attached around to the edge of the skin, where the development of the latter had been arrested. Until about the middle of the third month the viscera are situated in an expansion of the membranes of the umbilical cord, but at that time the anterior wall of the abdomen encloses them within the belly. Arrest of development of the wall had here allowed them to remain in their early assumed position. On the right side of the umbilical cord the membranous sac presented a large opening, which led into and exposed the cavity of the cœcum, the anterior portion of this viscus not having been formed. In the case lately dissected by Mr. Canton, the cœcum presented the apertures of the two ureters, the uterus, and a supplemental appendix, in addition to those of the ileum and vermiform process. No portion of the large gut had been developed, with the exception of that part of the caput coli mentioned; hence the opening of the right lumbar colon was wanting. The situation of the mouth of cloaca (as it might be termed) is due to the fact of the cœcum being placed at the earlier periods of intra-life near the umbilical region, whence it does not pass to the iliac fossa until between the fourth and fifth months. Additional remarks were made by Mr. Canton on this peculiar class of monstrosities, and the President hoped that Mr. Canton would favour the Society, at a future time, with such particulars as might be elicited on further dissection.

CONNEXION OF UTERINE AND OVARIAN DISEASE.

Dr. Tilt then read a paper on the connexion of uterine and ovarian disease, of which the following is an abstract:—He asked, Why should the prognosis of uterine disease be more difficult than that of the diseases of other organs? Why should very slight uterine lesions be sometimes attended by intense reaction? Why should it happen that when patients are cured of these lesions they still continue to suffer as much as they did before? He then stated, that many of these cases might be explained by the co-existence of ovarian with uterine disorder, the first disease being marked by the symptoms of the other, or else having supervened during the course of uterine disease. After dwelling on the anatomical unity of the generative system, and also having drawn attention to the unity of purpose by which the different organs of that system are characterised, he affirmed, that as the ovaries transmit to the uterus and receive from it a physiological stimulus, so they transmit to and receive from it a morbid stimulus. To prove that inflammation is transmitted from the uterus to the ovaries, he quoted the assertions of Mdme. Boivin, and Drs. Bennett and Doherty, and stated, that it principally occurred in cases of catarrhal inflammation of the cervix. He likewise showed that this transmission had also often followed the injudicious application of escharotics to the neck of the womb, or the employment of pessaries and stem-pessaries, the use of which he (Dr. Tilt) strongly deprecated. The transmission of inflammation from the ovaries to the womb, he sought to prove by alluding to the acknowledged fact, that the ovaries induce periodically a state of vascular turgescence of the walls of the uterus, and then showed that this action is perverted in that form of dysmenorrhœa, which is attended by a secretion of false membranes from the uterine surface. He afterwards gave cases to prove, that ovarian irritation, when of long standing, brought on those turgid, vascular, indolent swellings, to which Recamier, long since, gave the name of *erectile tumours*; and he alluded to an assertion lately made by Dr. Forget, of Paris, that the neck of the womb contained erectile tissue,—a fact hitherto unnoticed. Dr. Tilt concluded by giving the following interesting case:—A married woman, aged 25, was admitted a patient at the Paddington Free Dispensary for Women and Children. She was small in stature, of a sanguine constitution, and she had been married three years without issue. She complained of pains in the abdomen, of a slight discharge, and of dysmenorrhœa, with either a profuse or a scanty flow. On examination, he caused little pain by pressing the ovarian regions. The neck of the womb was sound in every respect. Considering that the general health of the patient was in fault, he gave opening medicine and tonics, and ordered injections with a solution of alum. This treatment was continued several weeks; the general health improved; the discharge almost disappeared; but the pains in the ovarian regions became worse, and dysmenorrhœa increased. He ordered inunctions with mercurial ointment and poultices to the inguinal regions, and the pain abated; but, a fortnight afterwards, leucorrhœa reappeared, with pain in the back; and, on a second examination, he found an ulceration of the inner surface of the cervix, which was outwardly red and swollen. He therefore admitted having taken a wrong view of the case; it was an ordinary case of ulceration of the neck; so he cauterised it with nitrate of silver, then with the acid nitrate of mercury, and, lastly, with potassa fusa. Such was the treatment employed during the space of eight months, the patient being sometimes better, at others worse, and sometimes remaining without treatment for the space of three weeks. The ovarian pains likewise varied; but, three months ago, finding that they were very intense, being augmented by walking or pressure, and tired by the pertinacity of the case, he made an exploration per anum, and found the ovaries swollen, and very painful when touched. He immediately changed his plan of treatment, and ordered ten leeches to each inguinal region, and the regular rotation of blister and ointment, besides cold enemata twice a-day. The pains subsided, the leucorrhea stopped, and a few weeks afterwards the neck of the womb was merely congested, but offered no ulceration. After the following menstrual period, he ordered a repetition of leeches, blisters, and ointment; and now the cervix is sound, the ovaries painless, and the patient well. In this case, he thinks ovaritis produced the inflammation of the neck of the womb, and kept it up, until the primary disease was discovered, and energetically treated. If that explanation holds good, it will throw light on some of the anomalies of uterine pathology. Dr. Tilt, in conclusion, observed, that in Dr. Murphy's cases, as in his own, we could not cure the disease of the womb; because, beyond the womb, preceding the womb, in the development of the organs of reproduction, and governing them through life, are the ovaries which often participate in, and cause that uterine inflammation which we alone attack; and thus, while we cure the small visible lesion, a hidden one remains to bring on relapses, and to perpetuate the patient's sufferings. In the treatment of those painful states of the neck of the bladder, so often caused by disease of the kidneys, we depend much less on direct applications to the neck of the bladder, than we do on those means by which we can attack the kidney; should not the diseased organ be governed by the same logic, in treating diseases of the organs of reproduction?

Some discussion followed the reading of this paper, in which Dr. Sibson, Dr. Murphy, Dr. Bennett, Dr. Snow Beck, and others, took part. The speakers generally appeared to coincide in the views promulgated by Dr. Tilt.

MICROSCOPICAL SOCIETY.

The tenth Anniversary Meeting of this excellent Institution was celebrated on the 13th ult., by the President and Council giving a *soirée* to the members and their friends. During the evening, the worthy President, George Busk, Esq., delivered the annual address, in which he took a review of the condition of the Society from its foundation to the present time; from which it appeared that the Society has steadily progressed, and is now in a flourishing condition. The members were congratulated on the very respectable appearance of the "Transactions of the Society," which contain papers and contributions to the advancement of microscopic science, of great value, illustrated, as they were, by plates of equal accuracy, and creditable alike to all concerned in the publication.

We are prevented from giving more than an analysis of the papers read during the past year. The first paper of the season was from Mr. Busk, "On the Anatomy of a Species of Thaumantias." This paper described certain points in the anatomy of a species of naked-eyed medusa, which appeared to the talented author not to have been previously sufficiently noticed. In it he described the structure of the disc, showing that the sub-umbrella is chiefly, if not solely composed of a muscular expansion, as also the velum or marginal valve, and that the muscular fibres constituting these expansions were distinctly marked with transverse striæ,—a fact that had been previously pointed out in another species of medusa, but which appeared to have been overlooked or disbelieved by later observers.

The apparent mode of connexion, also, between the gastro-vascular canals, and the reproductive glands was indicated, as well as the structure, and connexion of the tentacular bulbs and tentacles. The author also referred to the peculiar structure of the marginal bodies, and ventured to surmise, from certain considerations, that these bodies were most probably visual, and not auditory organs, as commonly supposed.

The next paper was one by Mr. Shadbolt, on a "Description of a New Form of Hair, from a Species of Tarantula," specimens of which were exhibited. On the same evening, Mr. J. T. Quekett read an interesting paper "On a Peculiar Form of Elastic

Tissue, found in the Ligamentum Nuchæ of the Giraffe." In this animal, the length of the ligament was 6 feet 2 inches, and its weight nearly nine pounds; and, as a proof of its great elasticity, it was stated, that, immediately on its separation from one of its attachments, it contracted to 4 feet, or became shortened rather more than one-third of its length. On microscopic examination, the individual fibres presented the usual curled extremities so characteristic of elastic tissue; but, besides this, they presented transverse markings or striæ. The diameter of the largest fibres was about the 1-500 of an inch, while others occurred as small as the 1-2000. The striæ were generally placed at equal distances, and were of equal breadth, being, on an average, as far apart as the fibre was wide. The structure appeared to Mr. Quekett to be something intermediate between elastic tissue and muscular fibre.

The next paper was also by Mr. Quekett, "On the structure of Cartilage in the four great classes of Animals" being the second contribution by this indefatigable observer on the same subject. The former paper described the principal characters of cartilage in general; the one under notice described the most simple form in which that anatomical element existed, viz., that of large, more or less hexagonal, nucleated cells, admitting of easy isolation from each other, and such as constituted the chorda dorsalis of many fishes, both in the adult and in the embryonic condition. The membraniform condition of cartilage was next described, as it exists in the ears of many animals. In this form the cells are generally well defined and collected together in a single thin layer, as in the bal, and sometimes into two or more layers, as in the mouse and rat. The different modes of arrangement of the cells in osseous fishes, and the mode in which they became ossified, were then described.

To their excellent Honorary Secretary, Mr. Quekett, or, as the President styled him, the "Atlas of the Society," they were indebted for another paper on the "Development of the Trout," or rather, "On the Structure and mode of Growth of certain tissues and organs of the Trout," as observed in specimens produced by the artificial mode of hatching the ova proposed by M. Boccius, and practised by Samuel Gurney, jun., Esq., and to whose liberality many members of the Society were indebted for interesting specimens of the fish in its embryo state.

Mr. Quekett's Paper referred principally to the growth or development from the period of exclusion, or extrication from a previously excluded ovum, to maturity, and was illustrated by numerous excellent figures.

Mr. Leonard contributed the next paper, "On the Growth of Grass." Having noticed, on a former occasion, the extreme rapidity with which grass grew, as much as an inch and a half in twenty-four hours, Mr. Leonard was induced to suppose that it might be possible to *see it grow* under the microscope. He therefore took some common meadow grass, (poa annua,) and, having manured it, he found that it grew at the rate of an inch or more in twenty-four hours. A young stem with its root being placed in a test tube, Mr. Leonard was fortunate enough actually to witness the growth of the blade, or rather, the upward movement of the apex. On the first experiment the movement appeared to be effected in starts; but, on re-adjusting the apparatus, the motion became continuous, or gradual and equable. The field of the microscope included rather more than the 1-100 of an inch, and the apex of the grass traversed it in less than ten minutes.

In reference to the mode of growth of this part of the plant, he states his opinion to be, that a gradual expansion or elongation of the cells takes place, and that there might also be an addition of cells produced near the root, which cells might be gradually developed and matured in the stem during the growth of that part.

Mr. Shadbolt read the next paper, "On the Structure of the Siliceous Loricæ of the Genus Arachnoidiscus."

Mr. Varley furnished the Society with some Microscopical Observations on a malady incident to house-flies. He had often noticed the death of flies in a peculiar manner, and their adherence to the glass of windows by the growth of a species of fungus or mould. He was led to regard this growth as the cause of the fly's decease, and proceeded to describe the mode of increase and development of the plant, which was extremely rapid. This vegetation, judging from Mr. Varley's description and drawings, appeared to have been *achlya prolifera*, a well known parasite upon dead or dying animal tissues, and, if so, its growth is probably not the cause but the consequence of the fly's death.

The concluding Paper of the year was one of great interest; it was by Mr. P. H. Gosse, on the "Architectural Instincts of *Melicerta Ringens*," an animal of the class Rotifera, which we regret we are prevented, from a want of space, giving to our readers.

In addition to the Papers read during the past year, and of some of which we have given brief abstracts, the President took occasion one evening, when there was no Paper before the meeting, to offer some remarks upon what had been denominated the Fungoid Theory of Cholera, of which we gave an abstract at the time.

Mr. Busk then took a review of the improvements that had been made in the microscope, both at home and abroad, during the past year, and to which interesting part of his excellent address we shall return next week.

CORRESPONDENCE.

LIFE ASSURANCE OFFICES AND MEDICAL MEN.

[To the Editor of the Medical Times.]

SIR,—Much has been written in the medical periodicals, from time to time, on the subject of the payment by Assurance Offices of fees to the medical referees of persons wishing to assure. A refusal on the part of the medical man to answer the "private and confidential" questions, without a fee, generally leads to the reply that the patient is to pay, as he is the person to be benefited. The Secretary to the Clergy Mutual Assurance Society has, however, in a letter to a clergyman, stated, as another reason why that officer does not pay the fee, that "the demand for it is by no means generally made by the Profession." I beg to make this public through the medium of your journal.

The Profession has plainly but to refuse an opinion without a fee, in order to compel the Clergy Mutual Assurance and other offices, which have not already done so, to recognize our just claims.

I am, Sir, your obedient servant,

ROBERT JONES.

COLLODION.

[To the Editor of the Medical Times.]

SIR,—Agreeably to your wish, I forward my formula for Collodion, which fully answers the purpose of stopping teeth, as mentioned in your valuable Journal of March 16th. My recipe differs from the usual process in three respects—viz., an increased proportion of sulphuric acid; a longer period for maceration; and an additional quantity of absolute alcohol. By the first and second alterations I obtain a more perfectly soluble cotton; by the latter the solution is considerably modified in its power of contraction, which is desirable for the aforesaid purpose.

The chemical manipulation is extremely disagreeable; the nitrous acid fumes are very abundant, consequently highly irritating to the respiratory organs. Great care is necessary in well washing the cotton; also a moderate heat in drying it. The process is as under:—

Take nitrate of potash, 4 lbs.; sulphuric acid, 8 lbs.; carded cotton wool, 8 oz.; mix the nitrate and acid in a glazed vessel, add the cotton, and constantly agitate with a glass rod for half an hour; then wash the cotton thoroughly in cold water, so that no trace of acid should be perceptible to test paper; then dry carefully, and the result will be a very soluble guncotton; then take 1 oz. of the cotton; rectified sulphuric ether, 16 oz. fluid; when dissolved, add 1 oz. absolute alcohol. Allow the solution to stand twenty-four hours, and the Collodion will be ready for use.

Yours, &c.,

J. T. DAVENPORT.

33, Great Russell-street, Bloomsbury.

ON THE PRESERVATION OF VACCINE LYMPH.

[To the Editor of the Medical Times.]

SIR,—You were so obliging as to insert, last week, a communication from me on the subject of the best way of preserving vaccine lymph in a fluid state; which has led to my receiving a letter from a country surgeon, who, in requesting me to give a more particular account of the mode of taking the lymph to be preserved, thus expresses himself:—"I am the more anxious to be well acquainted with the whole process, as (as a country practitioner and an unfortunate Poor-law Medical Officer) I shall be so very much benefited by your discovery." Now, although I have given this gentleman the information he asks for, (and with no slight degree of gratification, in finding that my little contribution to the sum of experience is likely to be useful to any of my professional brethren,) still, it occurs to me, that you, Sir, would perhaps find a corner in the *Medical Times* for the insertion of the substance of what I wrote to him, for the sake of other who may have the same difficulty.

My method is, to take all the lymph I can get from the eighth-day vesicle on a glass stopper, (elongated in a narrow, tongue-shaped form, for about an inch below the neck of the small bottle into which it fits,) and, having accumulated it on both surfaces of the stopper, near its end, I mix it well, with the point of the probe, with the glycerine held by the latter. Then, after the stopper is put into the bottle, (which is always to be kept standing up,) the lymph then, assisted by gravity, will collect itself into a distinct drop on each surface of the stopper,(a) to be ready for use, as I know from experience, during a very long period, and in any number of cases, that would not exhaust the stock.

I remain, Sir, your faithful servant,

R. R. CHEYNE.

43, Berners-street, March 25, 1850.

[To the Editor of the Medical Times.]

SIR,—In your number for the 23rd instant, Mr. R. R. Cheyne recommends that vaccine lymph should be kept wet for use by certain means which he specifies; adding, that its *activity* seems *rather increased* than diminished by the process, and that he *always succeeds* in developing the vaccine disease in its most complete form, even when lymph thus *kept wet for two months* has been used.

Perhaps some of your readers would desire, as I do, to know the number of cases in which lymph so preserved has been employed, that it may be seen what value attaches to the circumstance of Mr. Cheyne's having always succeeded with it. If that number is large, then indeed there must be decidedly an increase in the activity of the virus; because, in any considerable series of vaccinations with unpreserved lymph, even if perfectly fresh, there will occur a certain number of failures. It is notorious that the Princess Royal was repeatedly vaccinated without success; and I well know that the son of one of our leading physicians has been vaccinated from time to time for many years past unsuccessfully. We sadly want a lymph that will "always succeed."

But has your Correspondent no fear of decomposition occurring in an animal product, and a morbid one, which has been kept in the liquid state for months? No dread of a new, a putrefactive virus, being elicited in place of the vaccine? Where is the *healthy* secretion that can be kept liquid for months without chemical alteration? Is a product of disease less liable to putrefy?

With ivory points, dried immediately after charging, I have produced cow-pock "in its most complete form," above two months after the lymph had been taken; though, I must own, that in a series of more than a thousand cases, of which I have kept very minute particulars, I see the certainty of great disappointment and loss of time, in the long run, from the employment of any but recent matter, still fluid, which I would not wish it to be longer than twenty-four hours.

I am, Sir, your most obedient servant.

F. A. B. BONNEY.

Knightsbridge, March, 1850.

MEDICAL REFORM.

[To the Editor of the Medical Times.]

SIR,—As far as I can understand the present state of medical politics, there are two parties among the

(a) This convenient stoppered bottle can be got from Mr. Weedon, Hart-street, Bloomsbury, and, I suppose, from other instrument makers. However, it is easy to contrive a substitute for it.

General Practitioners; one of them advocating the establishment of a new College, while the College of Surgeons is to remain in all its *purity*; the other proposing to convert the College of Surgeons itself into the thing which they profess to abhor,—a College of General Practitioners. The latter party are particularly sensitive on the subject of the College of Surgeons, fearing I know not what from the establishment of a third College, as regards the interests or existence of the former.

Now, by which of the two methods proposed would the College of Surgeons, *as such*, be most effectually swamped? I take it, by the very arrangement proposed by those who deprecate the formation of a third College. There would then be no College of *Surgeons* at all.

I am, Sir, your most obedient servant,

A General Practitioner.

HOMŒOPATHIC STATISTICS.

[To the Editor of the Medical Times.]

Sir,—The Profession ought to be grateful to Dr. Inglis for his able *exposé* of the qualifications, or rather the want of qualifications, of the 100 individuals who practice homœopathy in England. It might be advisable, also, to publish the names of those who possess any recognized medical title. I am induced to suggest this, by observing that Dr. Inglis, in his enumeration of provincial homœopathic graduates in medicine, has stated one to have a "London" degree. It is probable, indeed, that reference is made to the same individual, who, in a preceding paragraph, appears as an extra-licentiate of the London College of Physicians; but, as the statement now stands, it might lead some to believe that the homœopath is a graduate of the University of London. It would certainly surprise the graduates of this University to find that any one of their number had deserted "legitimate medicine," and Dr. Inglis would confer a benefit upon them by making known the name of the person alluded to, that search may be made for it in the lists of the University. If the person is only an extra-licentiate of the College of Physicians, it should be so stated. I am, Sir, with all respect, your faithful servant,

M.D., London.

HEALTH OF LONDON DURING THE WEEK ENDING MARCH 23.

In the week ending last Saturday, the deaths registered in the metropolitan districts were 1026. This return shows a further increase in the mortality; for since it began to rise, the deaths during the two previous weeks were in the first 875, and in the second 967. In the ten corresponding weeks of the years 1840-9, they fluctuated between 770 and 1197, the latter amount of mortality having occurred in the twelfth week of 1845; the average of the ten weeks corrected for increase of population is 1071; the present return is therefore only less than the average by 45. The only classes of disease in which an increase on the average is remarkable, are those which affect respectively the organs of respiration, and the organs of circulation. The only instances in which complaints in the respiratory organs have been so fatal as in last week, at this season of the year, occur in 1845 and 1847; from pneumonia there were 90 deaths, (of which 71 were amongst children,) the corrected average is 85; from bronchitis there were 99, (of which more than two-thirds were among adults,) the corrected average is only 47. Both these diseases show a considerable increase, when the deaths are compared with the numbers returned in the two previous weeks. This excess, both on the weeks immediately preceding and on the corresponding weeks of former years, is sufficiently explained by the fact, that the mean temperature, which last week was only 37·8°, shows a great fall on each week throughout the whole month of February and the half of March; and, taking the corresponding weeks of 1840-9, it appears that it was never so low as at present, except in 1840 and 1845, and that in six of those years it ranged from 40° to 49·7°. The deaths from consumption last week were 135, a number less than the average. Amongst epidemics, small-pox, scarlatina, hooping-cough, and typhus are not so fatal as usual; but measles, from which there were 23 deaths, and diarrhœa, from which there were 20, are above the average. A death from cholera is recorded in the following terms:—At 83, London-road, St. George, Southwark, on the 16th of March, the son of an ironmonger, at the age of ten weeks, died of infantile cholera, after an illness of 20 hours. It deserves to be mentioned that three deaths were registered in one week from chorea, though it is not usual that more than double that number are returned in a year: the following are the particulars. At 5, Charles-street, Hackney-road, the son of a compositor, at the age of 8 years, died of "chorea, after an illness of three weeks;" at 25, York-street West, Ratcliff, the son of a painter, (deceased,) died at the age of a year and ten months, of "chorea;" and at 1, James-street, in Lambeth, the son of a glass-packer, (deceased,) died at the age of 15 years, of "chorea, after an illness of 23 days." The three deaths occurred, one on the 15th, and two on the 16th of March. Children are returned almost every week as accidentally suffocated in bed; amongst other deaths registered last week from this cause are two which occurred in one house. Two men and a woman died from the intemperate use of strong drink. Two men and six women died between 90 and 100 years of age. One hundred and eleven persons died in workhouses, 54 in hospitals, of whom 18 were in naval and military establishments, and 6 in lunatic asylums.

The deaths in the several hospitals of London occurred as follow:—

General.		Otto-house (Fulham) ...	0
St. George	0	Blacklands-house ...	0
Westminster	4	Northumberland-house	0
Charing-cross	0	Whitmore House ...	0
Middlesex...	0	Pembroke House ...	0
University College ...	0	St. Luke	0
Royal Free Hospital ...	1	Miles'	1
King's College	0	Warburton's	0
St. Bartholomew... ...	4	Lunatic Asylum, Bow ...	0
London	6	Bethlem	0
Guy's	6	Lunatic Asylum, Brixton	0
St. Thomas	5	Retreat, Clapham ...	0
For Convicts.		New County, Wandsworth	1
Hospital Ship, Unité ...	0	Peckham House ...	2
Penitentiary Hospital, Millbank	0	Camberwell House ...	2
Military and Naval		**Lying-in.**	
Royal Hospital, Chelsea (South)	1	Queen Charlotte's ...	0
		British	0
Royal Hospital, Greenwich (East)	7	City of London	0
Royal Military Asylum	1	Hospital, York road, Waterloo 2nd part ...	0
Coldstream Guards Hos.	1	**For particular classes.**	
Grenadier Guards' Hospital	0	Female Servant Invalid Asy., Stoke Newington	0
Scots Fusilier Guards ...	0	German Hospital... ...	0
Royal Ordnance	2	French Hospital	0
Dreadnought Ship ...	6	Portuguese Jews' Hospital	0
Lunatic.		German Jews' Hospital	0
Kensington House ...	0	**For special diseases.**	
Munster-house (Fulham)	0	Small Pox...	0
Normand-house(Fulham)	0	Fever Hospital	2
Sussex & Brandenburgh-house (Fulham) ...	0	Lock	0
		Consumption, Brompton	2

Total, 54.

MORTALITY TABLE.

Deaths in the Week ending Saturday, March 23, 1850.

(Metropolis.)

Causes of Death.	Total.	Average of Ten Weeks.
All Causes	1026	982
Specified Causes	1019	976
Zymotic (or Epidemic, Endemic, and Contagious) Diseases	161	172
Sporadic Diseases:		
Dropsy, Cancer and other Diseases of uncertain or variable seat	34	52
Tubercular Diseases	170	187
Diseases of the Brain, Spinal Marrow, Nerves, and Senses	120	124
Diseases of the Heart and Blood-vessels	47	29
Diseases of the Lungs, and of the other Organs of Respiration	231	168
Diseases of the Stomach, Liver, and other Organs of Digestion	53	59
Diseases of the Kidneys, &c.	15	9
Childbirth, Diseases of the Uterus, &c.	12	11
Rheumatism, Diseases of the Bones, Joints &c.	6	7
Diseases of the Skin, Cellular Tissue, &c.	1	1
Malformations	5	1
Premature Birth and Debility	29	23
Atrophy	18	13
Age	50	69
Sudden	31	16
Violence, Privation, Cold, and Intemperance	36	31
Causes not Specified	7	5

The following is the number of Deaths occurring from some of the more important special causes:—

Apoplexy	35	Heart	44	Phthisis	135
Bronchitis ...	99	Hooping-cough	36	Pneumonia ...	90
Cholera.....	1	Hydrocephalus	18	Scarlatina	14
Childbirth	5	Influenza	2	Small-pox	6
Convulsions...	35	Liver	7	Stomach	6
Diarrhœa	20	Lungs	12	Teething	10
Dropsy	14	Measles	23	Typhus	31
Erysipelas ...	4	Paralysis	18	Uterus	3

BIRTHS AND DEATHS.

	Births.	Deaths.	Births over Deaths.
Males	769	520	249
Females	693	506	187
Total.....	1462	1026	436

METEOROLOGY OF THE WEEK.

		Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Means
Electricity.*		P. and tension strong at 10 a.m., weak at 9 p.m.	P. and tension strong throughout the day.	Nothing shown.	Nothing shown.	Nothing shown.	Nothing shown.	P. and tension weak at noon.	
Rain in Inches.		0·00	0·00	0·02	0·00	0·00	0·01	0·09	SUM 0·12
Amount of Horizontal Movement of the Air.	Miles.	85	40	55	85	80	165	250	SUM 760
General Direction of Wind.	P.M.	E.	N.E.	N.	N.	N.	S.W.	N.N.W.	N.
	A.M.	N.E.	E. passing S. to N.W.	Calm.	N.	W. & N.	Calm.	S.W. & N.W.	
Difference between the Mean Temperature of the day and the same day on an average of 7 years.		— 11·4	— 7·8	— 1·5	— 3·0	— 4·7	— 3·8	— 7·4	— 5·7
Ditto. Dew Point.		26·8	21·1	36·8	27·0	30·9	31·5	26·2	28·9
Mean of Thermometer. Dry.		31·4	35·3	41·8	40·5	38·9	39·9	36·5	37·8
Mean of Barometer.		30·201	30·150	29·999	30·066	30 064	29·921	29·394	29·971

* In this Column, A. stands for Active; N. for Negative; and P. for Positive.

MEDICAL NEWS.

Apothecaries' Hall.—Names of gentlemen who passed their examination in the science and practice of Medicine, and received certificates to practise, on Thursday, the 21st March, 1850:—Charles Collison Hailey, Shefford, Beds.; John Colmer Austen, Plymouth; Charles Neate, Maidenhead: Matthew Inple, Ashby-de-la-Zouch.

Naval Appointments.—Assistant-surgeon A. Sibbald, M.D., to the Assistance.

Obituary.—On the 9th, Mr. W. Mickle surgeon, of Killingworth.—On the 18th, at Isleworth, W. Hutchinson, M.D., in his 58th year.—On Thursday, March 14, aged 53 years, Thomas Dixon Burrow, much and deservedly regretted. He was a member of the Royal College of Surgeons and licentiate of the Apothecaries Company from 1821, and had for twenty-three years been a successful practitioner at Settle, near Craven, where he died.—On the 26th inst., H. T. Holt, Esq., surgeon-accoucheur, of Great College-street, Westminster, in his 67th year.

The Levee and the Profession.—The following Members of the Profession received the honour of presentation to His Royal Highness Prince Albert at the last levee:—Dr. T. W. Burt; Mr. James Donnet, R.N.; Dr. McLennan; Mr. Simon; Dr. Charles Henry Scott; Dr. Sieveking; and Mr. Charles Nelson Wilkinson, R.N. The following Members of the Profession attended the levee:—Dr. Locock, Dr. Richard Bright, Dr. Forbes, and Dr. Forbes Winslow.

His Majesty, the King of Sardinia, has consented to become one of the Honorary Royal Fellows of the Royal Medico-Botanical Society of London, of which Her Majesty, Queen Victoria, is patroness.

Mr. Napier, of Swansea, has discovered a new explosive substance, which he calls "white powder," and says it is ten times as strong as gunpowder. It is composed of one part yellow prussiate of potash, well dried; one part sugar, well dried; and two parts of chloride of potash. These materials are to be finely ground separately, and then mixed well together.

The Queen has presented 105*l.* to the new hospital for consumption in Victoria-park.

Cholera in the Netherlands in 1848-9.—From the report published in the *Staats Courant*, it appears that the total number of cases was 43,860; of deaths, 23,258; of recoveries, 20,602. This statement does not include the military. The number of cases was in the proportion of 1 to 68 of the inhabitants.

Triplet.—The wife of a journeyman upholsterer at Bristol, has brought forth two girls and a boy at one birth—all doing well.

Asylum for Idiots—On Tuesday the Second Anniversary Festival of this Charity took place at the London Tavern, Bishopsgate-street, the Duke of Cambridge in the chair. The Chairman, in proposing the health of the Prince of Wales and the rest of the Royal Family, stated, that Her Majesty had given 250 guineas to the Institution, upon consideration, that His Royal Highness should have the power of presenting one patient to the Institution so long as it continued to exist. In the course of the evening, subscriptions were announced amounting to more than 2,600*l.*; and it appeared from a Special Appeal to the public from the promoters of the Institution, that establishments had been formed at Highgate and at Colchester. The Asylum at Colchester was the property of Mr. S. M. Peto, who had given the building rent-free for seven years, and had, moreover, advanced 1,000*l.* for the same period without interest. It was also stated, that, according to correct statistics, the number of idiots exceeds that of lunatics. In fact, the applications made to the Board, since the establishment of the Asylum, have been nearly overwhelming; and, at this time, they have 180 eligible cases waiting the election in April; and the Board cannot prudently take more than fifteen of that number. During the short time the Asylum has existed, the Board has taken a house of considerable capacity; they have filled, and enlarged it, and again it is full. Subsequently, by the liberal assistance of a benevolent individual, another house of larger capacities has been secured; it is now occupied, and will, in a couple of years, also be filled. The Board, however, thought that to do their duty by the trust committed to them, and to work out successfully the great experiment in favour of the most afflicted and debased portion of the human family, they must erect a building, with all the appliances and facilities indispensable for the undertaking. It was, therefore, proposed that a sum of money should be raised by ordinary subscription, and that the proceeds should be devoted to the building of an asylum. Dr. Lushington then took the chair, after the Duke of Cambridge retired. The health of the Medical officers of the Institution was drunk with the highest marks of respect; and Dr. Conolly returned thanks in a speech which excited the utmost attention of the Company.

Seamen's Hospital.—During the last year 4338 patients were relieved on board the Society's hospitals, the Dreadnought and Iphigenia. Of these 2239 were in-patients, and 2099 out-patients. Of the in-patients, 1475 were discharged cured, 230 were convalescent, 54 were relieved, 9 not cured, 8 expelled, 241 died, and 240 still under treatment. The income for the year was 8264*l.* 4s. 6d.; the expenditure, including the purchase of 2300*l.* stock, equalling the receipts. 350 cases of cholera were received on board the Iphigenia during the prevalence of the epidemic.

The Court of Common Council have made a grant of 105*l.* to the Royal Westminster Ophthalmic Hospital.

Death of a Medical Coroner.—An inquest has been held at Bolton on the body of Mr. Rogerson, surgeon, and Coroner of the borough of Wigan. The verdict returned was, death from apoplexy and disease of the heart.

The Real Cinnamon Tree is reported to have been found growing wild on the mountains of Jamaica. Cinnamon and tobacco are about to be cultivated extensively in that island.

The College of Chemistry, Liverpool.—Dr. Sheridan Muspratt, one of the most talented pupils and successful followers of Liebig, two or three years ago established a college of chemistry at Liverpool, which is, and has been ever since, in full working order. The design of the Institution, as stated in the prospectus, is to afford, at a very moderate expense, practical instruction in organic, inorganic, and blowpipe chemistry, and to create chemists capable of investigating and reporting upon all subjects relating to agriculture, arts, manufactures, &c. A design sufficiently laudable and comprehensive, to merit every support, and one which Dr. Muspratt has shown, that he possessed every requisite qualification to carry out efficiently. The students, in addition to the practical chemical advantages which they have in this college, have also access to a valuable German and English chemical library. There can be no doubt, therefore, that this college must add greatly to the reputation of Liverpool, and prove an admirable school for medical students desirous to acquire that practical knowledge of chemistry which the vast progress made by science of late years, renders it imperative they should possess. An attempt like this to found a school of practical chemistry in the provinces deserves to be aided by the best efforts of those who possess the means and capabilities to further the founder's views. But what are the facts? The Apothecaries' Company in London, who at present hold all legal power over the General Practitioners of this Kingdom and the Principality, have determined to render nugatory all Dr. Muspratt's endeavours to advance the knowledge of practical chemistry among medical students, by refusing to receive certificates for his lectures and practical manipulations, on the paltry plea "that their bye-laws will not allow them to recognize a lecturer who is not connected with a Medical school." The plea is paltry, and worse than paltry; it is not true. Brande and Faraday, for years lectured on chemistry at the Royal Institution, where there is no medical school, and yet their certificates have always been received, not only for the St. George's students, with which school, the Royal Institution, as regards chemistry, was in alliance; but also for pupils of other schools, who preferred obtaining their chemical lore from the English Prince of chemists, Faraday. The Apothecaries' Company, in refusing to recognize Dr. Muspratt's certificates, have committed a gross act of injustice, and, in all probability, have inflicted a serious injury on a talented and hard-working chemist. The sooner they retrace their steps in this matter the better will it be for their reputation for good sense, sound judgment, and a due appreciation of honour and justice.

Ozanne *v.* De Lisle.—This was a criminal action brought by Dr. Ozanne of St. Pierre le Rade, before the Royal Court at Guernsey, against Dr. De Lisle for calumny. It appeared in evidence, that Mr. W. R. Wakley having been taken ill, messengers were despatched for Dr. Ozanne and Dr. Magrath, both of whom had previously attended the family. Meanwhile, the case being urgent, Mrs. Wakley stood at the door, to stop the first medical man that passed. Dr. De Lisle was thus called in, and while he was feeling his patient's pulse, Dr. Ozanne arrived. As soon as Dr. De Lisle saw him, he refused to meet him. Dr. Ozanne inquired his reason, and was answered, in the presence of the family, all of whom were called as witnesses on the trial, that he (Dr. Ozanne) was "no professional man; he was an impostor, a quack, nothing but an impostor;" the indictment bearing, that such words were against the honour, credit, and reputation of the said Dr. Ozanne, and to his great prejudice and personal damage in his profession as a physician. In evidence of the plaintiff's position as a physician, a diploma from the University of Paris was produced, but the Court ruled, that it could not be received in evidence, as there was no one there to prove the seal of the University. Mr. and Mrs. Wakley, their son and nephew, then proved the utterance of the slander by the defendant, and testified to the calm and temperate conduct of Dr. Ozanne, who left the room after the words had been uttered. The father also stated, that Dr. De Lisle had not made any charge, but had handed over the case to Dr. Magrath. For the defence, evidence was brought to show that Dr. Ozanne practised homœopathy, and that that mode of practice was deemed quackery by the Profession. Dr. Magrath, Dr. Hoskins, Dr. Collonette, Dr. Corbin, Dr. Smith, of the 16th regiment, Dr. Tranter, and Dr. Mansell, all deposed to that effect, and some of them justified the term impostor; inasmuch as Dr. Ozanne was practising homœopathy under the shadow of a diploma granted by a University where allopathic doctrines only are taught. Dr. Magrath said, the oath a student took before the Faculties of Medicine of Great Britain forbade the practice of that system. He decidedly considered that homœopathy was quackery, imposture, and delusion—a delusion practised on the patient, as in submitting to it, he was deceived with the false belief that it might do him good. He would not meet a homœopathic practitioner professionally. No professional man could honestly practise homœopathy. The counsel for the defendant took that line of defence, quoting from works and Medical journals to the same effect. He also rested on the fact, that the professional position of the plaintiff was not proved, owing to the objection to receive the diploma as evidence. The bailiff, in summing up, set aside at once all that had been alleged respecting homœopathy, as being a question with which the Court had nothing to do. Had Dr. De Lisle confined himself to saying that homœopathy was quackery, and had not applied the terms "impostor" and "quack" to the plaintiff, he would not have been liable to action. The justification sought to be established by the evidence, was confined to the condemnation of homœopathy; but, no justification was given for the personal application of the words used. The jurats were unanimous in declaring that Dr. De Lisle's words were not justified, but were used without premeditation: that Dr. Ozanne's conduct had been moderate and forbearing, and concluded, by sentencing Dr. De Lisle to pay 5*l.* damages, 2s. 6d. (an *écu*) to the Queen, and the costs.—*Condensed from the Guernsey Star*, March 12.

TO CORRESPONDENTS.

On account of Good Friday, we publish, this week, on Thursday, and therefore go to press a day earlier than usual. In consequence of this, we are obliged to omit much of our correspondence and usual matter. We must also pass over the Report of the Acting Committee of the "British Medical Fund." We propose to publish this document in our next Number, and to devote some space to the consideration of the plan it advocates.

"A. B."—West India arrowroot is the fecula of the tubes of the *maranta arundinacea*; East India arrowroot, of the *curcuma angustifolia*; and Tahiti arrowroot, of the *tacca pinnatifida*. Tapioca is obtained from the roots of the cassava, *janipha manihot*.

"Studens" should read modern works. The liver of sulphur is the sulphuret of potassium.

"Enquirer."—In Russia, De Lisle's Thermometer is used, in which the boiling point is zero, and the freezing point 150°.

"A Citizen" asks, why he "eats more at the Mansion-house than at home."

[The mass of aliment, solid and liquid, which a man will devour without inconvenience at a dinner taken in company, in the midst of inflated speeches, &c. &c., is sometimes such, as, had he taken it, without such condiments, in his own solitary apartment, would have almost annihilated him.]

"Teetotaler."—We have already expressed our opinion of teetotalism. We fear that, as our Correspondent hastens from one mode of destruction, he is approaching another. He must remember nature is a glutton in nothing; that

> "Gross riot treasures up a wealthy fund
> Of plagues; but more immedicable ills
> Attend the lean extreme."

"Tyro."—It was the Romans who called the vital and sensitive principles *anima*, and the rational *animus*, or *mens*. To Juvenal—

> "——— Indulsit communis conditor illis,
> Tantum animas, nobis animum quoque," &c.

"Curiosus" shall receive an answer next week.

"An Aggrieved Apprentice."—1. We presume the party complained of has no authority over an apprentice. 2. An amicable arrangement with the principal for a transfer.

"The Mineral Waters of Kreuznach."—A Correspondent inquires the proportions of iodine contained in these waters. By referring to Dr. Prieger's work, (London, 1846,) we find in the Elizabeth spring, in sixteen ounces, iodide of soda, 0·0032145 gr.; in the source of Karlshalle, in the same quantity, iodide of soda, 0·0440 gr.; and in the Scanlenhof source, from an analysis of Dr. Knapp, under the superintendence of Liebeg, at Giessen, the following substances:—

Carbonate of lime	0·25553	gr.
,, magnesia	0·13018	,,
Proto-carbonate of iron	0 35623	,,
Phosphate of Alumina	0·09541	,,
Silica	0 99466	,,
Muriate of soda	108·70500	,,
,, lime	22·74900	,,
,, potass	0·46589	,,
Bromine of magnesium	1·78073	,,
Iodide of ,, ...	0·01247	,,
	135·54503	,,

The Elizabeth spring also contains bromide of soda; and the Karlshalle, bromide of lime and of magnesia. The waters appear beneficial chiefly in scrofula and glandular swellings.

"Mocha, Cheapside."—Rochleder states, the presence of cyanogen in caffeine is more than probable; cyanides being formed, when the latter is treated with alkalis. A result not noticed with quinine, morphine, &c.

ORIGINAL LECTURES.

LECTURES
ON
THE CHEMISTRY OF THE POISONS;
OR, ON
PRACTICAL TOXICOLOGY.

SHOWING THE APPLICATIONS OF CHEMISTRY TO THE DISCOVERY OF CRIME.

By H. LETHEBY, M.B., Lond:
Lecturer on Chemistry in the Medical College of the London Hospital.

LECTURE XV.

Chemical Properties of Muriatic Acid: its affinity for Water; its Action on the Vapour of Ammonia; on Litmus Paper; on Earthy Carbonates; on Metals; on Metallic Oxides; on Oxy-Acids; on Ink; on the Metalloids.—Action of the Acid on Organic Compounds; on Sugar; on Woody Matters; on Albumen; on Dead Mucous Membrane; its Disinfecting and Antiseptic Properties.—Tests for the Liquid Acid: their respective Delicacies and Fallacies.—Quantitative determination of the Acid in pure and mixed Liquids.—Chemical effects of the Acid on the Body; *post-mortem* appearances.—Antidotes.—Modes of detecting the Acid in Organic Liquids; in the contents of the Stomach, Urine, &c.—Fallacies to be encountered.—Detection of it in solid Substances.

To-day, gentlemen, we shall examine

THE CHEMICAL PROPERTIES OF LIQUID HYDROCHLORIC ACID.

1st. *With regard to its affinity for Water.*—This property is manifested by the acid fuming in the air, even when it contains no more than about 20 per cent. of free acid. The very strong solutions of hydrochloric acid also evolve heat when they are mixed with water, but the elevation of temperature so produced is not very great.

2ndly. *The Action of Ammonia on the Vapour evolved at ordinary temperatures from the Liquid Acid* is very marked; it is very manifest, when the liquid does not contain more than 8 per cent. of free acid. One of the easiest modes of demonstrating this property is to approximate the stopper of the muriatic acid bottle to a glass rod moistened with a little liquor ammoniæ, when dense white fumes of muriate of ammonia will be instantly produced.

3rdly. *The reddening effect of the Acid on Litmus Paper* is very perceptible, with a liquid containing only 0·012 per cent. of free hydrochloric acid.

4thly. You are, doubtless, very familiar with *the effects of ordinary muriatic acid on the earthy carbonates;* but, as you may be required to state at what point of dilution their effects cease to be manifested, I am bound to direct your attention to the following facts:—Here is a solution which contains about 2 per cent. of free acid; its density is 1010; and, if I pour it on a few grains of chalk or marble, you will notice that effervescence immediately ensues. Should the solution, however, be made warm before it is added to the marble, this effect is manifested, even when the liquid does not contain more than 0.05 per cent. of free muriatic acid.

5thly. *As regards the Action of Liquid Muriatic Acid on Metals,* I may state that several of the common metals are attacked with great energy by it. This is the case with zinc and iron, both of which readily appropriate the chlorine of the acid and evolve hydrogen. The former of these metals will produce decomposition, and occasion effervescence in a liquid which contains only 0·8 per cent. of free acid; and, if the liquid is made hot, decomposition will ensue even when the solution contains as little as 0·4 per cent. of it. Iron, however, does not act with quite so much energy on these fluids; in point of fact, the liquid must contain at least 1·5 per cent. of free acid in order to exhibit the phenomena which you have just witnessed. Again, tin is still more slowly attacked by hydrochloric acid; for, as you may here notice, a liquid which contains as much as 4 per cent. of the free acid does not re-act upon the metal unless you give it time, or apply heat to the mixture, and then you will find that a solution containing only 0·05 of acid will slowly and silently dissolve the metal, and will produce a liquid which has the power of precipitating a solution of corrosive sublimate. The other metals commonly met with, as, for example, copper, bismuth, lead, antimony, arsenic, and mercury, are not so readily attacked by liquid hydrochloric acid.

6thly. *The Action of the Acid on Metallic Oxides.*—In most cases there is a mutual interchange of elements when hydrochloric acid is added to a metallic oxide; but if you should happen to employ an oxide which contains more than one equivalent of oxygen, then a second element of the acid will, in many instances, be decomposed, and chlorine be evolved. This fact is exhibited in the case of the peroxides of manganese, lead, and chromium; and, as the evolution of chlorine is a very important feature in the decomposition, it serves as a means of recognising the presence of free hydrochloric acid. To resort to experiment by way of demonstrating this, you will find that peroxide of manganese will liberate chlorine when the liquid does not contain more than three per cent. of free acid; and, as I have already pointed out, this gas is at once distinguished by its greenish yellow colour, by its action on litmus paper, and by its communicating a blue, or violet blue colour to a strip of paper moistened with a solution of starch and iodide of potassium. If, however, you apply these tests to the liquid itself, you will find that, on mixing it with the peroxide of manganese, they indicate the presence of chlorine in a solution which does not contain more than 0·03 per cent. of free muriatic acid.

7thly. *The Action of Spirits of Salts on those Acids which contain a large Proportion of Oxygen*—as, for example, nitric, chloric, bromic, iodic, chromic, and permanganic acids, is very peculiar; for, as these acids readily yield their oxygen to the liquid, chlorine and other matters are set free. Here I have a solution which contains about 0·2 per cent. of muriatic acid; on adding to it a few drops of nitric acid, and then applying heat, I obtain a liquid in which I have no difficulty in detecting free chlorine.

8thly. You are perhaps aware, that *muriatic acid has the power of discharging the colour from ordinary writing-ink,* and that it does this by reason of its affinity for the iron contained in the compound. Now, as this fact might, at some time or other, become the subject of chemico-legal inquiry, I have thought it desirable to ascertain at what point of dilution the acid ceases to exhibit this re-action; and, with the view of illustrating the question, I shall take a liquid containing 0·4 per cent. of free hydrochloric acid, and wash it over some writing made with ordinary ink upon letter paper. You will notice, after a few minutes, that the acid gradually withdraws the iron from the ink-stain, and leaves the galls in the condition of a reddish brown compound. When the writing is old, the re-action is not quite so rapid as you here witness. It is possible, moreover, for you to obtain these results with a somewhat weaker solution of the acid; but, under such circumstances, you must allow the liquid to act for a much longer time.

9thly. I ought to state, before I leave this part of the subject, that *muriatic acid does not exert any peculiar action on the non-metallic solid elements.*

ACTION OF MURIATIC ACID ON ORGANIC SUBSTANCES.

Unlike the other mineral acids, spirits of salts does not manifest a very energetic action on organic compounds. In some instances, however, the results are sufficiently well-marked to deserve special notice. This is the case for example:—

1st. *When strong muriatic acid is brought into contact with ordinary cane sugar.*—An acid of sp. gr. 1200 instantly converts it into grape sugar, the change being accompanied by the production of a yellow colour; and, if the acid is heated in this compound, the solution rapidly acquires a deep brown colour, from the formation of a resinous-looking body, containing ulmic and sacchulmic acids. A liquid which contains 16 per cent. of free acid will act in a similar manner, though it requires a longer time for the full manifestation of its effect; and one which contains 8 per cent. of the acid will acquire an orange-red colour when it is boiled for a minute or so on a fragment of white sugar, or allowed to stand thereon for twenty-four hours.

2ndly. *Other vegetable substances,*—as, for example, cork, wood, &c., which contain resinous matter,—are discoloured by muriatic acid, but the effect is not very marked or very important.

3dly. *Hydrochloric Acid Coagulates and Precipitates Solutions of Albumen.*—Strong solutions of albumen (as white of egg) are instantly coagulated by those acids which have a density above 1034. The weaker acids require time for the manifestation of this effect; for example, an acid having a density of 1015, containing 3 per cent. of free acid, will begin to act in about fifteen minutes, and the coagulum is complete, looking like blanc-mange, in about one hour; an acid which contains 1·5 per cent. will act imperfectly after an interval of twelve hours; weaker solutions of hydrochloric acid lose their faculty of coagulating the undiluted white of egg. The serum of blood, or a solution of albumen made by mixing the white of one egg with an ounce of water, is, like the preceding, instantly precipitated by acids which have a density above 1070. Weaker acids require time to produce their effects, and, after the dilution has gone beyond 3 per cent., they cease to manifest any coagulating action.

4thly. *Action of the Acid on Dead Mucous Membrane.*—Strong spirits of salts instantly whitens a dead mucous surface, and, when it is applied to the interior of the stomach, it produces, in the course of four or five minutes, a greenish gangrenous looking spot. This effect is due, partly to the action of the acid on the blood contained in the tissue, and partly, as I believe, to its influence on the bile with which the interior of the stomach is so frequently lubricated. All solutions of muriatic acid, down to those which contain only 0·5 per cent. of free acid, act in a similar manner, though more slowly, on the dead mucous membrane of the stomach; and I ought to state, that an acid of the last-mentioned strength requires a period of fifteen minutes for the production of this peculiar effect.

Most solutions of muriatic acid have the power of softening, and then dissolving, animal substances. This is particularly well marked in the case of the mucous coat of the stomach, and, relying upon this property, it has been said, that those cases of softening and perforation of the stomach observed in healthy individuals who have died soon after taking a meal, have been dependent on the free hydrochloric acid contained in the gastric juice. This, however, is a matter which is open to debate; for it has yet to be proved that free muriatic acid ever exists in the fluids of the healthy stomach. Directing your attention to these preparations, you will notice, that the stronger solutions of hydrochloric acid soon act on the mucous coat of this organ, dissolving it away, or else leaving it as an olive-brown compound, which is easily removed, even by means of the finger-nail, from the substratum of muscular and peritoneal membrane. Solutions of this acid which have a density below 1020 merely discolour, gelatinize, and swell up these tissues, as if they had been submitted to a prolonged maceration or boiling; gradually, however, they dissolve away the mucous and cellular tissues, leaving the substrata intact. And, as you may here notice, the solvent effect of the acid is more rapid when the solution is kept for a few hours at the temperature of 80° Fahr.

Questions have arisen, on more than one occasion, with regard to the preserving or antiseptic properties of this acid. Sir W. Fordyce gives an account of a drysalter who made a large fortune by his superior mode of preserving meat for long voyages; and, it is said, that the secret of his art consisted in the employment of dilute muriatic acid, a small quantity of which was put into each cask of meat. I cannot answer for the truth of this statement, but you may perceive, from the experiments which I am about to perform, that very dilute muriatic acid has the power of removing the unpleasant odour from putrid animal substances. In olden time it was sometimes employed as a disinfectant, but, to quote from Dr. Pereira, "it is admitted on all hands to be much inferior to chlorine. The Messrs. Rogerson deny that it possesses any disinfecting property. It is, perhaps, equally difficult either to prove or disprove its powers in this respect. The experiments of Guyton-Morveau in purifying the Cathedral of Dijon, in 1773, are usually referred to in proof of its disinfecting property. If it possess powers of this kind, they are certainly inferior to those of chlorine or the chlorides of lime and soda, but, in the absence of these, hydrochloric acid gas may be tried."

TEST FOR LIQUID MURIATIC ACID.

(a) *The odour of the Acid,* which is very peculiar.

This property, however, is not perceptible in liquids which contain less than 8 per cent. of the free acid.

(b) *Its sharp sour taste* is a quality which is well marked, even when the solution is diluted so as to contain about 0·05 per cent of the acid; but this character ceases to be distinguishable in liquids which are a little weaker than this.

(c) *The action of the Acid on Litmus Paper* is, as I have already said, a very delicate test for this acid, the reddening effect produced by it being evident when the fluid contains only 0·012 per cent. of free hydrochloric acid.

(d) *Solutions of Lead and of a Protosalt of Mercury* give white precipitates with free or combined muriatic acid; but thesetests are not of a very characteristic nature, inasmuch as other compounds will re-act upon them in a similar manner. In the case of lead, the test ceases to act with solutions which contain less than 2 per cent. of acid; but the mercurial test will act when the liquid contains no more than 0·006 per cent. of hydrochloric acid. In each case the precipitates are insoluble in dilute nitric acid.

(e.) *A Solution of Nitrate of silver* produces a white curdy precipitate, either with the free acid or its soluble compounds. This precipitate (chloride of silver) is distinguished by its becoming purple on exposure to light, by its being quite insoluble in boiling nitric acid, by its ready solubility in liquor ammoniæ, and by its producing a transparent, horny-looking mass when it is collected and fused. A solution which contains no more than 0·004 per cent. of the acid, is rendered opalescent when it is added to this test liquor; and by using thirty drops of the solution, and testing it in the manner described, you can demonstrate the presence of the 1-1000th of a grain of hydrochloric acid. Again, you will notice that when a drop of nitrate of silver is placed on a piece of glass, and then inverted over a bottle containing liquid muriatic acid, the test solution soon acquires a white milky appearance from the action of the evolved vapour. This effect is very evident when the liquid contains only 4 per cent. of free acid.

(f.) *The evolution of Chlorine* from liquids containing free muriatic acid, when they are heated with the peroxides of lead, or manganese, is a property which I have already demonstrated to you, and I have pointed out that this character is exhibited when the liquid contains only about 3 per cent. of free acid.

Fallacies of these Tests.—The soluble bromides, bromates, iodides, iodates, cyanides, and chlorides, all give, with a solution of nitrate of silver (which is one of the most important of the tests for this acid), a white precipitate, insoluble in nitric acid, and soluble in a solution of ammonia; nevertheless, if you resort to all the tests which have been mentioned, I am not acquainted with any compound, excepting free muriatic acid, which will produce the results to which I have just referred; for while many liquids have the faculty of exhibiting an acid character, and of giving a white precipitate with nitrate of silver, yet they have not the power of evolving chlorine when they are heated with a peroxide. Again, though the vapour evolved from a solution of prussic acid has the property of whitening a drop of nitrate of silver, and thus simulating the effect produced by spirits of salts, yet the odour which is always associated with the former liquid will at once serve to distinguish it; and I can hardly imagine that the three other acid fluids, namely, hydriodic, hydrobromic, and hydrofluoric, which give similar results with the solution of silver, can become sources of fallacy, inasmuch as they are too rare to be easily accessible to the public.

QUANTITATIVE DETERMINATION OF MURIATIC ACID.

(a.) *In a free and pure State.*—When the liquid to be tested is free from impurities, its strength may be estimated by a calculation founded on its specific gravity (*vide* last lecture); or it may be determined by neutralizing the solution with a known quantity of recently ignited carbonate of soda, every fifty-three grains of which are equal to thirty-seven of dry muriatic acid. Another convenient mode of ascertaining the amount of free acid is by the employment of a weighed portion of dry Carrara marble, using the calcareous compound in small granules. After allowing the acid liquor to act upon the carbonate for twenty-four hours, the undissolved portion is to be removed, washed, dried, and weighed; the loss which the marble has sustained indicates the proportion of acid present; for every fifty grains of the carbonate dissolved are equal to thirty-seven of free hydrochloric acid. Lastly, the amount of acid may be estimated by precipitating it with a solution of nitrate of silver, and thus obtaining the insoluble chloride, every 144 grains of which, when dried and fused, are the representatives of thirty-seven grains of the dry acid.

(b) *In an Impure and combined State.*—Whatever may be the nature of the impurities in the liquor to be tested, a salt of silver will precipitate the whole of the chlorine contained in it, and thus give a true representation of the total amount of muriatic present; but, this mode of proceeding does not show how much of that muriatic was in a free state, and consequently it does not put us in a condition to answer a question, which is of great moment to the toxicologist. In order, therefore, to determine the proportion of free hydrochloric acid in the mixed liquid, it is to be subjected to distillation at as low a temperature as possible, drawing over about two-thirds of the solution. The distillate and the residuum are then to be respectively tested for hydrochloric acid with a salt of silver: the amount of metallic chloride furnished by the former indicates the quantity of free acid present, while that furnished by the latter is the representative of the *combined acid*.

Again, if the liquid to be tested is merely a mixture of free muriatic acid and a soluble chloride, no other free acid being present, these two compounds may be respectively and accurately estimated, the one by means of Carrara marble or carbonate of soda, and the other by means of a soluble salt of silver. Here, for example, is a mixed liquor of this description. On introducing a weighed portion of the calcareous carbonate, I learn from the amount dissolved, that the liquid contains 3·2 per cent. of free hydrochloric acid, and, on precipitating the residual fluid with a solution of nitrate of silver, I obtain proof concerning the presence of 7 per cent. of this acid; consequently, as 3·2 of this amount were in a free state, the remainder, namely, 3·8 must have been in a state of combination.

Leaving the chemistry of muriatic acid, we will now proceed to apply our knowledge to the toxicology of this subject.

CHEMICAL EFFECTS OF MURIATIC ACIDS ON THE TISSUES AND FLUIDS OF THE LIVING ANIMAL BODY.

The re-actions which you have just seen, when strong spirits of salts is poured on the dead mucous tissues, are precisely similar to those which have been noticed in cases of poisoning by hydrochloric acid; for, in the first place, the contact of the strong acid with the mucous membrane of the mouth, fauces, œsophagus, and gullet, produces a whitening effect; gradually, however, after a more prolonged action, the tissues become discoloured; they dissolve, or else become so rotten, as to peal off in large flakes. These effects are so well described by Mr. Taylor, that I shall take the liberty of quoting his words to you. "*Post-mortem appearances.*—The fauces, larynx, and œsophagus, have been found highly inflamed, the mucous membrane lying in detached masses, or actually sloughing away. In one instance the membrane was thickened. The coats of the stomach have been so much corroded, that, in many places, there was only the peritonæal tunic left; and, in attempting to remove the organ in this case, the parietes gave way. The contents have sometimes been of a yellowish, at others of a dark green colour. In one case where the fundus of the gall-bladder came in contact with the stomach, it was observed to have a bright green colour, arising from the well known action of this acid on the bile. In no instance yet reported was the stomach perforated. On removing the contents, the lining membrane has been found blackened, and presenting a charred appearance, the blackening extending through the whole length of the duodenum, and being especially marked on prominent parts of the numerous valvulæ conniventes, the intervals being stained of a greenish yellow colour, from the action of the acid on the bile. When death did not take place until after the lapse of several days, the coats of the stomach were highly inflamed, and for the most part in a sloughing state; large dark shreds of membrane were hanging from the sides of the organ, especially about the pylorus. The inflammation had extended also into the duodenum."

Besides these appearances, other effects and symptoms are commonly manifested which arise from the chemical action of this poison. The outer coating of the stomach is generally of a leaden hue, and the vessels which ramify upon the tunics of the alimentary canal are commonly filled with dark pitchy looking blood, some of which may, by the destruction of the mucous coat, have escaped into the cavity of the stomach or intestines, and have been vomited up during the lifetime of the sufferer. In this case, a guinea-pig, where the animal has been killed by making it inhale an atmosphere containing about 1 per cent. of muriatic acid gas, you will observe, that the blood throughout the body is dark and uncoagulated. And I believe that a similar appearance is usually presented when death has been occasioned by the liquid acid.

The antidotes to this poison are albumen, chalk, flour and water, magnesia, &c. The knowledge derived from the chemistry of this subject will teach you, that you have no time for delay, and that it would be a mischievous act to introduce a tube along the œsophagus for the purpose of pumping out the contents of the stomach.

MODES OF DETECTING MURIATIC ACID IN ORGANIC COMPOUNDS.

(a) *In the contents of the Stomach and other Animal Fluids.*—As, preliminary to this inquiry, you are to ascertain if the liquid be acid, if it contain sulphuric acid or a sulphate, and if it evolve a vapour which whitens a solution of nitrate of silver. Professor Christison first directed attention to the fact, that animal substances retain muriatic acid with great force, insomuch that when you distil an organic fluid containing a comparatively large proportion of free hydrochloric acid, but little of the acid will pass over into the receiver until the organic substance begins to charr and undergo decomposition. To remedy the inconvenience which arises from this property, Professor Orfila has recommended the employment of a solution of tannic acid for the purpose of precipitating all the gelatine and albumen contained in the questionable liquor, after which it may, according to Christison, be distilled from a saline bath, consisting of two parts of crystallized chloride of calcium and one of water, the temperature of which never exceeds 240° of Fahr. You are to stop the distillation before the residuum becomes dry, and to test the distilled liquor for free hydrochloric acid.

Among the sources of error to which this process is liable, are the following:—

1st. *The evolution of a volatile chloride*, as for example muriate of ammonia, which may be contained in the animal fluids. This fallacy is, to a certain extent, guarded against by Professor Christison, who states that muriate of ammonia is not volatilized at the temperature of 240 Fahr.

2ndly. It is possible that some other acid, as, for instance, sulphuric, lactic, &c., which is capable of decomposing the chloride naturally contained in the stomach, may re-act upon these compounds, and so liberate normal muriatic acid. To avoid this source of fallacy, you must test the suspected liquid for the acids in question.

3rdly. It has been asserted by many chemists, among whom are Prout, Children, Berzelius, Gmelin Terdemann, Dunglisin, and Liebig, that *the gastric juice naturally contains free hydrochloric acid;* and there cannot be a doubt that the mode of analysis adopted by these chemists has furnished greater or, less proportions of uncombined muriatic acid. It is possible, however, that the acid in all these cases has resulted from a decomposition of the alkaline or earthy chlorides contained in the gastric secretion; for, according to Hunefeld, Blondlot, Barreswill, Bernard, Lehmann, and others, this secretion does not exhibit the re-actions of a liquid containing free hydrochloric acid; but they state that the muriatic acid which is furnished by a distillation of this fluid results from the decomposition of the soluble chlorides contained in it, the change being effected by

some more fixed organic acid, probably lactic. Lehmann has made a careful examination of the gastric juice of the dog; and he asserts, that when this secretion is evaporated *in vacuo*, and the volatile matters transmitted through a solution of nitrate of silver, there is no turbidity of the test liquid until the secretion is concentrated to the consistence of syrup, at which point he finds that lactic acid decomposes the chlorides of magnesium and calcium, but not those of potassium and sodium In the course of my own experiments on this subject, I have noticed that a similar series of results occur when the gastric fluid is deprived of its animal matter by means of tannic acid, so that the non-evolution of the hydrochloric acid is not dependent on the presence of these compounds. Nevertheless, as this source of fallacy is still open to consideration, it is proper to meet it by saying, that the quantity of free muriatic acid, ordinarily obtained from the contents of the stomach, does not exceed the 1-1500th of its weight. I have stated this on the authority of Dr. Prout, who says that the quantities of free muriatic acid discovered by him in a pint of acid fluid, ejected from the human stomach in three cases of dyspepsia, were 5·13, 4·68, and 4·28 grains respectively; the total amount of free and combined acid being 17·24, 17·03, and 20·93 grains. He thought, moreover, that about one half of the muriatic acid contained in the gastric juice of the rabbit existed there in a free state.

Another mode of analysis has been advanced by Mr. Taylor, which is, in my opinion, utterly worthless. He recommends us to take two portions of the suspected liquid, to precipitate all the chlorine contained in one of them by means of a solution of silver, and thus to ascertain the total amount of muriatic acid present. The other portion is to be evaporated to dryness, the residue dissolved in water, and its chlorine estimated as before; this (says Mr. Taylor) furnishes the proportion of combined acid; and, by subtracting the one amount from the other, he determines the proportion of free hydrochloric acid. But, if you reflect for one moment on the facts which I have just detailed to you, namely, that muriate of ammonia is frequently contained in the fluids of the stomach, and that this salt is sure to be volatilized by the heat employed in the process; that the earthy chlorides are decomposed by certain fixed acids, both of which are naturally present in the stomach, you will easily perceive that the process is worse than valueless, inasmuch as it is a certain source of error; and my surprise is, that it was ever entertained by one who has the reputation of being a practical toxicologist.

There is one character, on which you can place great reliance in your search for free hydrochloric acid in organic liquids, and that is the evolution of chlorine when the suspected fluid is distilled with peroxide of manganese. In conducting this process, you are first to deprive the liquid of animal matter by means of tannic acid, then to distill it from a saline bath, and, lastly, to stop the process before the residuum acquires the consistence of syrup. By operating in this manner, you may perhaps lose a little muriatic acid, but you will avoid many sources of fallacy.

The urine is a liquid which is sure to contain a considerable proportion of combined muriatic acid in cases of poisoning by this agent. You are, however, to bear in mind, that this secretion always contains a greater or less proportion of alkaline chlorides; but, as far as my observations have gone, this proportion rarely exceeds 12 per cent. of the solid extract; in fact, the mean of all the analyses hitherto recorded is 10 per cent.; and, excepting the few cases recorded by Simon and Dumenil, the proportion is under 9 per cent. In stating this fact to you, I am anxious that you should give it its proper value, and no more than its value. You are to remember that the proportion of alkaline chlorides, secreted by the kidneys, is always in a direct ratio with that taken into the stomach, and hence, to take the generality of cases, you will find that this proportion is diminished in disease, simply because the patient is deprived of the power of taking food and saline condiment. If, therefore, in a case of suspected poisoning by this acid, you find an excess of alkaline chlorides in the urine, you have, in my opinion, made out a fact, which is, in conjunction with other circumstances, a matter of considerable moment to you as toxicologists.

(b) *Detection of the Acid in solid organic matters.*—This is to be effected by digesting the organic substance in distilled water, and then testing the solution for free hydrochloric acid. The ordinary black dyes are changed to a bright red by means of spirits of salts,—a re-action which may be made available in the discovery of this acid.

ORIGINAL CONTRIBUTIONS.

PRACTICAL CASES.

By A. STOBO, Esq.,
Member of the Royal College of Surgeons.

RUPTURE OF THE UTERUS.

Margaret, age about 32, stature short, well formed, mother of seven children; has had one miscarriage. Agricultural labourer. Was taken in labour about 8 p.m. 16th January last. Membranes burst before midnight. An arm of child presented. Midwife (an old negress) and husband told me they pushed this back, and *shook* the patient to get the child from *laying crosswise*. Pains were regular and sharp until 2 a.m., 17th, when there was a very violent expulsive pain, and the placenta was extruded. Patient said she felt the child fly up into her bowels; at same time considerable flooding followed, but expulsive pains ceased. Had pain generally over her bowels, and in right shoulder and side of neck, and cramps in her legs.

17th, 9 a.m.—First visit. Countenance anxious; breathing rapid; voice strong and natural; pulse thready and above 120; complains most of pains in right shoulder and side of neck; great tenderness over abdomen, and cannot bear it touched; placenta, with cord attached, lying on bed, between the thighs, among a quantity of clotted blood; right hand and wrist of fœtus protruded externally. Returned the arm and made an effort to turn the child, but failed; felt the uterus was extensively lacerated and the intestines among my fingers; head still resting in uterus. The arm was then drawn down as far as prudent, and amputated close below shoulder, the cylindrical portion of humerus separated from the head rendering it unnecessary to divide the bone. Introducing the hand the second time, pushed the right shoulder further over to the left side, and succeeded in laying hold of the legs; brought the feet down and turning, so as to bring face of fœtus in position for passing pelvis, proceeded to deliver without delay, fearing every moment the patient would expire. A large gush of blood and coagula followed passage of the head; the pulse was, however, not much altered. As nothing else was at hand, administered a few drops of tinct. lavand. c. and spt. æther sulph., in a little plain water, and desired the dose to be repeated if faintness returned. Having remained long enough to ascertain that there was not much disposition to further flooding, ordered small quantities of thin arrowroot, perfect quietness and immobility,—particularly warning against the danger of sitting up. A very light bandage was put round the bowels, and means taken to render her bed as comfortable as circumstances permitted.

18th.—Has past a feverish and restless night; a little refreshed from some short naps; takes nourishment readily; tenderness of abdomen increased; tongue furred and moist; considerable discharge from uterus—principally coagula of blood; difficulty in passing urine, with frequent desire; it is high coloured, and deposits pink-coloured sediment, mixed with large quantity of mucus. Ordered sol. tart. antim., gr. j. to pint, to be taken frequently. Calomel, gr. x.; morph. mur., gr. ½, in a pill, at bed-time; ʒj. comp. jalap in the morning.

19th.—Slept a little during night; voice good; tongue moist; pulse 120; skin dry and hot; discharge very free; no operation from medicine; bowels tender to touch. Repeated dose comp. jalap.

20th.—Not visited; bowels remaining unmoved, a dose of castor oil had been directed.

21st.—Has rested better two last nights; urine less troublesome; bowels very freely moved and less tender on pressure; pulse 110; discharge plentiful; continues to take her nourishment, and some chicken tea, and water sweetened with brown sugar, when she desires it.

22nd.—Bowels rather too free; pain in abdomen; mitigated uterine discharge very free, and becoming offensive to the smell; complains of pain in both iliac regions, and in her back; pulse above 100 and feeble, tongue less coated; has increased appetite.

Feb. 5th.—Improves slowly; leaves her bed for a short time each day; pulse 100, and feeble; appetite good; discharge not much discoloured, and less offensive.

11th.—Continues to mend slowly; complains most of weakness in her limbs, and pain in her back; discharge nearly stopped.

[A few editorial remarks on the above case of rupture of the uterus may not be amiss, and indeed seem required at our hands. It is truly wonderful what extent of injury can take place without rendering recovery impossible. Being stated to be an "agricultural labourer," we presume that she was a negress as well as the ignorant midwife who attended her; and there is no doubt but that in the tropical climates, the blacks show a power and tenacity of life, under circumstances of extraordinary suffering and injury, for which we may look in vain among their white brethren. We recollect having read somewhere of a young negress, in one of the West India islands, who, being taken with severe labour pains, became so frantic with suffering that she actually ripped herself open, and was found alive at the foot of a tree some time after the accident, her bowels on one side of her and the child on the other; she was carried home, and, we think, ultimately recovered.

In the present instance, as there was no previous hæmorrhage, we cannot attribute the expulsion of the placenta before the birth of the child to its having been implanted upon the os uteri, but in all probability to the violence which had been done to the child by endeavouring to force back the presenting arm, and to the unfortunate mother, by the absurd attempt to shake the child out of its unfavourable position. It reminds us of the good old practice of tying the patient upon a ladder, then turning her with her head downwards, and violently jolting it to alter the presentation of the child. With all this rude and brutal violence, superadded to the presence of malposition, no wonder the uterus was roused to abnormal and violent action, and ultimately burst.

With all deference to the worthy communicator of this singular case, we must be permitted to differ from him as regards his attempt to return the arm. No wonder it failed. Did it ever succeed? There are few rules in midwifery more valuable, than that "the presenting arm should never be returned;" for, in truth, we can scarcely succeed in pushing it beyond the brim, even with a most unjustifiable and dangerous degree of violence, and in almost every case, therefore, it is merely doubled up by the side of the shoulder, and comes down with the next pain or two. This was La Motte's great rule; and, if he had never enunciated any other great practical truth, he would have had a sufficient claim to the gratitude of posterity. A presenting arm is never a serious obstruction to the passage of the hand for the purpose of turning, excepting where the state of the uterus and of the patient generally forbid any attempt at performing this operation, until by bleeding and other appropriate measures the soft parts have become sufficiently relaxed—to those Practitioners who should assert that they have succeeded in returning the arm, we would reply, that the very condition which rendered it possible, was precisely what contra-indicated its being attempted, inasmuch as it was a proof that the operator's hand would have passed without difficulty. In the present instance, as only the hand and wrist protruded, there would have been probably but little difficulty in turning, if the presenting arm had not

been interfered with. With this exception, the treatment was unexceptionable. The solution of tartar emetic was evidently of much use, and tended powerfully to keep down inflammatory action, and to aid the action of the 10 gr. dose of calomel. As a considerable quantity of intestines were distinctly felt by the operator to have protruded through the torn wall of the uterus, it must be looked upon as a fortunate circumstance, that no part had become strangulated at the moment when the uterus contracted after the removal of the child. It is probable, that as the uterus sunk down to the brim of the pelvis when it contracted, the intestines, confined by the mesentery to the spine, were again withdrawn from the uterine into the abdominal cavity; and that the rupture, being greatly diminished by the altered size of the now contracted uterus, and its edges thus held in close contact, rapidly healed with the first intention.—Ed. *Medical Times.*]

DIVISION OF THE PAROTID DUCT.

Job, a field-labourer, prime of life, quarrelled with another negro, who struck him a blow in the face with a sharp-pointed spike. A deep cut was made in the cheek, extending from outer angle of eye down to the lower jaw; the parotid duct was divided; the wound was more of a lacerated than of an incised character. Two hours after the injury, blood had crusted round the edges, and a stream of saliva dropped from the lower edge of the wound, particularly when masticating a bit of bread.

A common bristle was introduced into the opening of the duct into the mouth, and, on coming out at the wound, was directed into the portion of the duct next to the gland. Two stitches and some slips of adhesive plaister kept the sides of the wound in close contact; the bristle was withdrawn on the sixth day; in less than ten days the wound had entirely healed, leaving passage of the duct open, as the patient has never suffered any further inconvenience from the accident.

Tortola, Feb., 1850.

DESULTORY SKETCHES.

By DR. BUSHNAN.

THE PRESENT STATE OF PRACTICAL MEDICINE.

The day-dream of the young Physician, akin to that of life itself, glows with unclouded, bright, and cheering anticipations. As "Hope springs eternal in the human breast," so has he ever at his command a thousand medicines for every ache that flesh is heir to—a thousand potent spells, by whose magic is assuaged the sorrow which knoweth no comfort, and nervelessly made to fall the hand of the Destroying Angel on its intended victim. Flushed with the pride of young life, and as yet partial in his views of the great economy of the created world, he is apt to forget the aphorism of Hippocrates—

"απας ανθρωπος εξ γενετης νοσος εστι;" (a)

and armed with all the panoply of his art, he fights against disease as against a giant, to be made to succumb and be subdued. Such, however, in reality, is the positive condition of man—such are the terms on which life is bestowed,—such, alas! is the finality of our terrene existence,—the cool shadow of the tomb. *Nascentes morimur, finisque ab origine pendet.*

The thousands and tens of thousands that daily perish—the ceaseless stream of men disappearing in the hazy mist of time—the stillness of the deserted ruins of Babylon—the quiet in Nineveh, once proud in her chariot-warriors—the fallen glories of Greece and Rome, the lone mothers of dead empires, all teach us, on a grand but impressive scale, the inefficiency of human art, and are tokens, withal, of the iron destiny which awaits man and the most glorious of his works:—

"All has its date below. The fatal hour
Was registered in Heaven, ere time began.
We turn to dust, and all our mightiest works
Die too. The deep foundations that we lay,
Time ploughs them up, and not a trace remains.
We build with what we deem eternal rock—
A distant age asks where the fabric stood,
And in the dust, sifted and searched in vain,
The undiscoverable secret sleeps."

The force of these lines is too palpable to require elucidation. The actual reality of the truths they convey must be confessed by every person who has weighed and studied minutely the phenomena of disease, and learned to consider man in that broad spirit of philosophy, which, while it connects him with the past, and links him with the present, no less distinctly associates him with the future. I would not, however, have it affirmed, that the life of man, individually considered, is absolutely to be weighed in the scales of this amply comprehensive balance, as, indeed, some political economists would lead us to believe—and perhaps the cold and no less rigid evidence of the statician inclines to show;—still, such *is* the life of human beings in the mass, appalling and desponding as the suggestions may be which arise from such a mode of contemplating human existence. True it may be, that "all has its date below;" it cannot, however, be denied, that it is equally true, that we irresistibly pursue our natural instincts to preserve life and avert death—to speculate on the phenomena of the one, and, by our discriminating judgment, reduce these speculations to the practical bearing of staying the latter.

I am not of those who believe all art in the treatment of disease to be inefficient; still less do I make common cause with the parties who conceive that for all ails there is a cure. I suspect the truth is somewhat midway between the two, with a very large allowance for the almost unerring and ever active *Vires Medicatrices Naturæ.*

In a field so wide and so rapidly expanding as that of Medicine, it might seem almost presumptuous to say what is actually its present condition. Chamelion like, it shows itself with a different aspect to almost every observer. As, however, there are always some leading principles which give their impress to the minds of the day, or direct the course of their observations into a particular channel, so I conceive that this observation applies with no less truth to the pursuit of Medicine—a science which is pre-eminently founded on the faithful interrogation of the phenomena of nature. Fitfully, indeed, does the current of Medical opinion at times sway the practice of the profession. With a Boerhaave, and the mighty host who espoused his views, the derangement of the fluids—the *error loci*—constituted the essential element in the great vocabulary of disease. To a Hoffmann and a Cullen, the proximate cause of disease appeared to reside in the solids; and hence the almost universal theory of spasm of the extreme vessels, which they individually advocated, and which was supported by so much learning and ingenuity. Recently, within our own memory, Broussais has endeavoured to ascribe to a peculiar form of gastro-intestinal irritation the most prevalent of our disorders; and, though he has not satisfied British Practitioners of the general applicability of such doctrines, he has had a most powerful control over the practice of our French brethren, and awakened the attention of our countrymen to a more scrutinising consideration of the functions of the mucous tissues.

Prior to the date of Broussais, Medical theorists seem to have laboured especially to solve the phenomena of disease by one great principle, the control and direction of which was at once to constitute the arrestment of the disease, and the triumph of the art. The abettors of each successive theory conceived they had, in the success of their practice, the most demonstrative evidence of the truths of their theories. Thus, many concurrent circumstances led them to the adoption of what they conceived to be a just exposition of the phenomena of nature. But in those and earlier periods of the history of Medicine, a bold theorist could fearlessly launch before the world, problems buoyant in the imperfections of the art, and whose very first elements were simply rudimentary. He was sheltered from contradiction by the undeveloped condition of all the various sciences, which directly, as well as indirectly, bear on the knowledge of the functions of the animal body, or the action of those agents which are believed to be capable of modifying, checking, or altering its diseased condition.

A change has now silently but steadily come over the philosophy of men, though anticipated long since by the immortal Bacon. The dashing character of *à priori* speculating (for it cannot deserve the name of reasoning, resting on the baseless fabric of assumptions), has insensibly merged into the more cautious and more satisfactory procedure of observation and facts. Our age can now boast almost of the mathematical certitude of its propositions; these have been tried by time, they have been confirmed by time, and their final substantiation awaits the award of the future. But the splendid *eclât* of a theory is now swallowed up in the sober consideration of its facts; and cautiously thus built up, its brilliancy vanishes, while it comes secured to us as the reward of the patient train of investigations which the mind has undergone in its attainment.

As then all the sciences have been extending, medicine has equally shared in that expansion; and the natural effect of the accumulation of a series of facts has been to check the speculative tendency of generalization, to curb the flighty wings of theories, and to fashion out first principles on the more substantial basis of the gradual development of facts. That there may be, even in the protean form of disease, as in the harmony of sounds, one key-note to which every other answers, and to which all must yield, is not beyond the range of probability; but the time has not arrived for us successfully to pronounce where it lies. The almost ephemeral fate of all systems that have been produced in the wide range of the long centuries during which the art has been cultivated, affords us but an indifferent prospect of such a consummation. In arriving at the accomplishment of such an object, the mental powers, however, acquire a refinement they otherwise could not have possessed; and, foiled in their aspirations, they *now* are devoted to the more humble task of searching out the development of special principles, as capable of illustrating and embracing at least certain classes or groups of diseases. Therein rests the strength of our modern practice and theory combined, as contradistinguished from that of preceding eras; and by that, I venture to conceive, eventually some principle of unity in the philosophy of disease may be established, which, if not destined to command universal assent, will at least enable us to draw the lines of demarcation in a clear, bold, and lucid manner, between those pathological conditions which are the simple efforts of the frame to recover the lost harmony of its functions, and those which are positively the indications of local or general contamination of the system, and the unequivocal harbingers of a fatal termination.

It is the *symptomatizing* disposition that most indubitably marks out the present epoch of the practice of medicine from all others that have hitherto been; and probably, also, it will be found hereafter to distinguish it most particularly from those that are to follow. I conceive this disposition to trace to its special localization each morbid action, however much it has been carried to excess, (as undoubtedly it has,) was in itself the natural result of the comprehensive, sweeping, and broad generalization of preceding eras, based, as it was, on imperfect facts. These, now, are more precise, more truthful in all their varied bearings; and hence the subsequent steps will naturally be to arrange, generalize, and systematize these into their special groups and allied affinities. Engaged in the prosecution of these local actions, we obtain more satisfactory knowledge of the relation they present to the general harmony of the health; nevertheless, it cannot be questioned, but that such minute symptomatology is not unattended with its disadvantages. Among these, it most distinctly leads the mind to what is often, after all, the minor part of the disease—a palpable effect, no doubt, of a *major* cause, involving the whole body corporate. No more distinct evidences of an action of the kind can be desired, than the inspection of the various modes, after which the scrofulous diathesis makes its demonstration; sometimes in the mesenteric glands; on other occasions it is altogether external, as in the glands of the neck, or in the meibomian follicles of the palpebræ. It may appear as a sequela of measles, in the scrofulous hip-joint, in

(a) Man is from his birth diseased.

other strumous diseases of the bones, or it may present itself as hydrocephalus; or, finally, it assumes the fatal form of phthisis pulmonalis. He that would cure the malady must unmask his battery against the primal deranged state of the constitution; begin with the very elements of life,—the disordered assimilative process, so indissolubly connected with impure air, impure water, bad food, and the depressing passions. This may perhaps be deemed too palpable an illustration. Dropsy, which by the people generally, and also by many professional men, is held to be a distinct disease, is far from being always so. It is oftener much less a disease itself than the symptom of a more deeply deranged state of the constitution; for sudden death has been occasionally the result of apparent perfect cure. Nor do I think that the cases of inflammatory dropsy, which are sometimes noticed, are in the least subversive of the general proofs of this assertion.

In conclusion, then, while I would disclaim any intention whatever to reject the trial of new remedies, or the slightest wish to withhold my faith from the views of our brethren, as to the successful issue of their cases, I would feel disposed to have a more trustful confidence in the *Vires Medicatrices Naturæ* than seems to be accorded by the mass of the practical men of the day. Theory, indeed, is not more opposed to theory than practice is opposed to practice, yet (and the observation was old as Celsus, "*ad eandem tamen sanitatem suos perduxere ægros*") patients come round; and are we not thereby taught the powerful agency of the inherent properties of the human body to repel disease, and maintain its own health?

As regards the importance of taking into account the operation of the *Vis Medicatrix Naturæ* in our plans for the treatment of diseases, we may derive a useful lesson from the history of surgery. The whole foundation of the superiority of modern surgery over that of ancient times and of the middle ages in Europe, rests on the axiom, that nature acts the healing power when the system is once placed under favourable circumstances for its exertion. It surprises us, at first sight, that surgeons were so slow to discover this great principle. There was no lack of observation, even in the most ancient times. But, so long as observation remained uninstructed by science, that is, so long as it was limited to the narrow circle of every day practice, many things passed before the eyes to which the eyes were blind. It was necessary, that some exact knowledge of the animal economy should arise before light fell on what are now considered almost self-evident rules for the management of wounds, injuries, and operations. It seems now to us almost inconceivable, that there should have been a time when it was not at once seen, that the process by which a wound heals was not an indispensable function of the living body, and not the effect of the application made to its surface. It strikes us with the like astonishment, that the simple rules applicable to so many of the great operations in Surgery should have been so slowly brought to perfection. How beautifully do the simple rules for the application of the ligature in the cure of aneurism illustrate the essential features oft he great plan on which surgery advances in improvement. And if Medicine proper is not to advance by a like plan, its progress must, at least, be parallel for the most part. There may be many things still hidden, both in Surgery and in Medicine, which, when the light falls on them, will seem as simple and obvious as the rule, that the ligature in aneurism shall not be applied to the diseased portion of the artery, but at a point where it is healthy. In the history of the principles for the cure of aneurism, there is a book of wisdom applicable to the future improvement of Medicine as well as of Surgery. We have to study the natural healing tendencies of the living system, and the several conditions under which they perform their functions exactly, or become defective, excessive, or irregular. It is the more necessary to urge this point, because, while the healing power of nature, as regards wounds and injuries, has been freely acknowledged, and for a long time acted on, the *Vis Medicatrix Naturæ*, as an element in the recovery from diseases, has been in our time kept almost wholly out of sight, being too often considered as a remnant of the prejudices of a past age. Nevertheless, this power, though unacknowledged and unstudied, has made its influence felt in the Profession; nay, strangely enough, by the progress of correct views of the animal economy, we have come to bow to the paramount empire of this power in the cure of disease, at the very time when we have been refusing to confess its existence. Nor is it too much to expect higher benefits from the more direct study of its influence. Our pathological estimate of the precise nature of diseased actions is now more correct and enlarged than formerly; but it does not necessarily follow that our *ratio medendi* should be *pari passu* more successful than heretofore. Our present successful plan of cure (for this, undoubtedly, cannot be made the subject of a difference of opinion) is, I apprehend, due to our general non-interference with the course of nature in the succession of morbid actions, save, and then only, when we see them running on rapidly to a fatal result. The modern triumph of our art is more in the happy forbearance exemplified in our negative treatment, than in the positive success of any heroic remedy. By not obeying that almost instinctive impulse that urges us to interfere with the progress of natural, though morbid actions—by eschewing the *nimia diligentia Medici*—and by having, above all, enforced a most strict system of hygiène, I think the science of Medicine has attained the present high place it holds among the beneficial arts of life, and that it will still further enhance the value of this frail gift of mortality, which is only the precursor of a better and a happier state of existence.

7, Nottingham-place, Regent's-park.

HOSPITAL REPORTS.

ST. BARTHOLOMEW'S HOSPITAL.

LITHOTOMY.

We were present at Bartholomew's on last Saturday morning, when we had the opportunity of witnessing some operations of interest; the first of which, by Mr. Lloyd, was the removal of a stone from the bladder of a comparatively young man, who had suffered from symptoms of it for some time past. Mr. Lloyd intended to have cut for the stone on the previous Saturday, but the patient had not returned an enema which was then given him to relieve a loaded state of the bowels, and in straining to do so had emptied the bladder.

The ordinary lateral operation was performed; and a silver tube having been introduced, and left in the wound, the patient was removed to bed.

REMOVAL OF ENLARGED GLANDS FROM THE AXILLA.

The next operation, by Mr. Lawrence, is instructive, as showing the difficulties, and occasional impossibility, of diagnosis which some diseases present, even to our most skilful and accomplished surgeons. The patient to whom we refer was a woman between 20 and 30 years, who had what appeared to be scirrhous glands in the axilla, and so placed at ts anterior margin as to seem continuous with the structure of the mammary gland. The incision was made almost parallel to the margin of the pectoral muscle, through the integument, down to the glands, which were cautiously dissected out, and found not to be connected with the mamma. Several vessels, which bled freely, were secured, and water-dressing applied to the wound.

Mr. Lawrence observed, that it was not often that a mass of glands, presenting such appearances as those now removed, were met with in this locality. He had been induced to operate, believing, from their situation and other circumstances, that they were of malignant character. Such, however, was found not to be the case, for they showed a large quantity of yellow matter deposited in their structure, some part of which retained its natural glandular state. The yellow substance Mr. Paget had decided to be strumous; of this there was little doubt, as, in one of the glands just cut open, suppuration had commenced. Had the nature of the disease been fully determined upon, it would have been a question, whether nature and the strength of the patient might not be sufficient to cause the absorption of such a mass without an operation. Mr. Lawrence considered that it would, and, had it been possible with certainty to diagnose their character, he should not have thought of removing them. This proceeding had, however, been fully justified by their doubtful character.

UNIVERSITY COLLEGE HOSPITAL.

LARGE NÆVUS—HÆMORRHAGE—OPERATION.

The patient was a feeble, unhealthy-looking, new-born infant. The nævus was placed over the brachial blood-vessels, immediately above the elbow-joint. It was more than two inches in diameter, and projected considerably from the surface, becoming more full and prominent when the child cried. The colour was dark, especially at the middle of the tumour, where it was even black. The skin, which was involved in the disease over the whole mass, was, upon the middle of this, very thin, and had here allowed a slight oozing from the surface. Hence the blackness.

In consequence of the age and puny condition of the infant, taken in connexion with the size of the tumour, Mr. Quain determined to apply slight pressure for a time, till circumstances more favourable for the success of the operation he intended to perform should arise. Accordingly, a small air-cushion, with an inverted loose part to fit the tumour, was applied, together with a narrow bandage,—the latter beginning over the hand. This management, with also a lotion of liquor plumbi, mixed in common water, immediately over the nævus, having been continued for about a fortnight, and the child having been at the same time well nursed, the health was greatly improved. But, at the expiration of the time mentioned, or in nearly three weeks, hæmorrhage came on, and the operation was at once performed.

Mr. Quain passed two strong double ligatures crossing one another under the middle of the tumour, and, having divided the skin in the track of the ligatures, tied the ends so as to strangle the vascular mass in four parts. It may be mentioned, that after the removal of the bandage and air-cushion, and while the ligatures were being prepared, the hæmorrhage was restrained only by pressure applied upon the brachial vessels *above* the disease.

After the separation of the slough, the wound put on a very healthy appearance. It is now nearly altogether cicatrised, and the child is in all respects doing well.

NÆVUS OF THE LIP.

In another case of nævus, a small one, upon the lip of a child, Mr. Quain applied nitric acid, its application being guarded with a solution of carbonate of potash.

EPULIS—OPERATION.

A girl, 15 years of age, has presented herself to show the state of her mouth after an operation, which was performed a few weeks ago. The history of the case is briefly this:—About two years since a swelling was perceived in the gum, and its size increased very slowly till about three months since, when it began to grow rapidly. For some time it had bled constantly when touched, and often spontaneously. The hæmorrhage lately had been very free.

The swelling is connected especially with the upper lateral incisor of the right side, (the gum around it,) and the tooth has been displaced by the tumour. It extends about half an inch on the fore part of the gum, and as much on the opposite side; is at the same time prominent, spongy in texture, and of a deep red colour.

After having removed a tooth, Mr. Quain divided the bone vertically with a small saw at each side of the tumour, and then cut away the intervening piece with a pair of oblique cross-cutting pliers.

The part is now soundly healed.

After the operation in this case, it was stated by Mr. Quain that the bleeding in operations about the head is, in his opinion, more abundant when chloroform is administered than when the operation is performed without the use of that substance; and the difference in this respect was attributed to the

effect of the anæsthetic agent upon the circulation in the head. This statement was, however, not adduced as an argument against the use of the agent in question.

It was, likewise, at the same time mentioned, that in operations about the mouth, the patient is best placed in the sitting posture. In this position of the body, the blood which flows is readily evacuated from the mouth, even when the patient is insensible, whereas it tends towards the fauces, and causes an appearance of suffocation, when the patient is recumbent.

GUY'S HOSPITAL.

REMOVAL OF A STEATOMATOUS TUMOUR.

On Tuesday, the 26th ult., Mr. Hilton removed a small tumour from below the right clavicle of a strong healthy man. The point of interest about this case was, the change which appeared to have taken place in that portion of it which was, probably, usually pressed upon by the man's brace. The distinction between this portion and the surrounding fatty structure was well marked, its look was that of a firm fibrous mass. There is a kind of fatty tumour to which Sir Benjamin Brodie refers in his Pathological Lectures, which would seem to be closely related to the one excised by Mr. Hilton. Their peculiarity results from the blending of a larger proportion of cellular with the ordinary fatty tissue, rendering them more dense and of a firmer texture or consistence. In this case, however, the areolar tissue seemed concentrated in one locality; in those mentioned by Sir Benjamin Brodie it was diffused throughout the mass. Like the common fatty tumour, they may occur with a good state of health, and never assume the characters of malignant disease. We can bear testimony to the influence of large doses of liquor potassæ, as mentioned by Sir Benjamin Brodie, over these remarkable growths, having tried it with marked effect in two instances. Its action was slow, and required a perseverance which it is difficult to induce in a patient for the removal of a complaint which causes him so little trouble and annoyance.

AMPUTATION OF THE FORE-ARM—CIRCULAR OPERATION.

Mr. Cock(a) removed, by the circular operation, the fore-arm of a man who a month before had, by some accident, run a large crowbar through his right hand, smashing the two outer metacarpal bones, and, probably, a third. In consequence of this, sloughing took place, and several abscesses formed in and around the joints of the wrist, &c., destroying them and causing the discharge of portions of bone. The back of the hand and lower part of the fore-arm were covered with foul, unhealthy-looking sores, exposing some of the carpal bones. The arm was removed about the junction of the upper and middle thirds, and just above a part where an abscess had denuded the surface of the radius.

The same method was followed by Mr. Cock in the amputation of a boy's thigh for long-standing disease of the knee-joint, which all remedies had proved unable to remove. The boy's health was rapidly becoming worse; and Mr. Cock had therefore taken advantage of a slight temporary improvement to operate, as the only means of saving his life. In both these cases a very good covering for the stump was formed, and the operation took but a short time for its performance.

Many have entered very warmly into a discussion as to the relative merits of the circular and flap methods. We do not think that this matter can be decided by the results of the cases, inasmuch as equally good stumps follow from both, and indifferent ones are not more likely to occur from the one or the other in the hands of a good operator. The principal point of distinction appears to lie in the greater ease and speed with which the flap operation can be performed; the bone can be more readily sawn through, and the arteries more easily seized and tied,—points of considerable importance for those who have but few opportunities for practice.

(a) This gentleman's name was unfortunately misspelt in our last.

PROGRESS OF MEDICAL SCIENCE.

FRANCE.

[Paris Correspondence.]

ELECTION OF M. MALGAIGNE.

The long-protracted Concours for the Chair of Operative Surgery, vacant by the death of Blandin, has at length terminated in the election of M. Malgaigne. Public opinion had, from the commencement, pointed out M. Malgaigne as the candidate most worthy of succeeding to the eminent man whose loss even now will be imperfectly supplied; and the verdict of the jury is but an echo of the judgment already pronounced by every impartial spectator of the contest. Many had asserted, that the Faculty of Medicine was unfavourably inclined towards M. Malgaigne; but, if any feeling of the kind did exist, it was not permitted to influence the result of the Concours.

STAPHYLORAPHY.

M. Sedillot, Professor at the Faculty of Strasbourg, presented a memoir, this week, to the Institut, on a new mode of operating in cases of cleft palate. Hitherto, surgeons had exclusively confined themselves to the operation first proposed by M. Roux; but circumstances occasionally occur to render this method inapplicable; and it was a case of the latter kind which suggested to M. Sedillot the process now to be described.

In all cases of congenital fissure of the palate, this organ is more or less atrophied from loss of its functions, while union between the edges of the wound is impeded by contraction of various muscles attached to the palate. The surgeon endeavours to counteract the effect of these contractions by forbidding his patient to swallow, even the saliva, for the first two or three days after the operation; but it is almost impossible to suspend deglutition effectively. Hence M. Sedillot conceived the idea of dividing those muscles by whose contraction the edges of the wound are drawn asunder. This done, the lateral portions of the velum palati are easily brought together and kept in contact; the ligatures are no longer in a state of constant tension; the soft parts do not ulcerate so quickly; and, if the ligatures have been properly applied, the cure is certain.

Following out these ideas, M. Sedillot divides the four abductor muscles of the palate, and the soft palate itself, completely through. The wounds heal in a few days, and the motions of the velum palati are not impeded afterwards. In illustration of this theory, the author related, at some length, a very interesting case of split palate, in which M. Roux's method had been twice employed without success.

The new operation of M. Sedillot was followed by a speedy and perfect cure.

DIMINUTION OF THE FIBRINE OF THE BLOOD.

In a former letter I noticed the experiments of M. Marshal de Calvi, relative to the causes which may determine diminution of the fibrine in the circulating fluid. M. Marshal had concluded, that motion communicated to blood drawn from a vein is an absolute cause of diminution of the fibrine. This conclusion has been fully confirmed by more recent experiments of M. Corne, a young military surgeon. The first and the last quarter parts of each bleeding were received in a cylindrical vessel; and the two middle quarters in another vessel of the same shape and dimensions. One vessel was allowed to remain quiet; the other was rapidly agitated for ten minutes. The blood was then analysed in about six hours afterwards, and the proportion of fibrine in the agitated blood was invariably found reduced.

From these experiments the author concludes, perhaps a little hastily, that the same influence is exercised during circulation in the vessels of the living body, where an active movement of the fluid must also diminish the proportion of fibrine.

In febrile disorders this cause is brought into action, and increases the special defibrinating influence of the fever. In inflammation, on the contrary, instead of promoting the increase of fibrine, it opposes it, and thus acts as an antagonist to the special influence of the inflammatory element.

NEW MODE OF TESTING SUGAR.

One of the chief deficiencies of the practical physician—and it is one extremely difficult to get over—is his imperfect acquaintance with practical chemistry. The little he knows is of no avail in unravelling the deeper secrets of pathology, while a more intimate knowledge would require a degree of study which few men in active practice can possibly bestow. Hence any mode of facilitating chemical processes—any discovery which substitutes for a difficult analysis a popular test of ready application—is an invaluable boon to the Medical Practitioner.

In this point of view, the discovery of M. Maumené, communicated at the last meeting of the Institut, must be viewed as a most important one, should experience confirm it, and show that it is easily applicable. M. Maumené announces, that the presence of sugar in any fluid may be discovered by means of a simple testing paper.

Contrary to the assertion of Liebig, the author affirms that chlorine acts energetically on sugar, and converts it into a species of caramel. The chlorides and bichlorides enjoy the same property. If solutions of sugar and of bichloride of tin be mixed together, and allowed to evaporate, the fluid soon becomes brown, and in twelve or eighteen months is changed into a jelly of a dark brown colour. By applying heat we obtain the change much more rapidly; but it must be carried to 130 or 150 degrees.

From these simple facts the mode of constructing a test-tissue for sugar is easily deducible. A slip of white merino is dipped for four or five minutes in a solution of the bichloride of tin (one part to two of water), and then gently dried over a sand bath. The test-tissue is now prepared. Nothing is more easy than its application. Suppose we wish to test the urine. A drop or two is placed on the test-tissue, and the latter held over the flame of a lamp or candle. The characteristic dark stain is produced in about a minute. The sensibility of the agent is great. When only ten drops of diabetic urine were mixed with 100 cubic centimetres of water, a solution was produced which turned the test-tissue completely dark. Healthy urine, uric acid, urea, &c., have no effect whatever on the colour of the chloride. It is true that this simple method will not enable the practitioner to determine the quantity of sugar contained in a fluid; but, the facility of its application and great sensibility are, we repeat, advantages of very great importance.

TYPHOID FEVER.

The Academy of Medicine was chiefly occupied with the report on the epidemic diseases of 1848; and the report itself almost exclusively confined to typhoid fever; yet, alas! without a particle of light on the causes of this affection, or a shadow of improvement in its treatment. During the year 1848 typhoid fever prevailed epidemically in seven of the French departments; the number of epidemics being ten. It is evident, however, that they were not very widely spread, because the total of persons attacked amounted to 403 only. Of these, 71 died, showing a mortality of one in five and two-thirds. This is extremely close to the mortality of the epidemics observed between the years 1841 and 1848, and from it we draw the sad conclusion, that Medical Science exercises little or no influence over the mortality of a disease, which, under all circumstances of season, treatment, and locality, ranges between five or six recoveries to one death. On the causes of the epidemics, or the best mode of treatment, the Reports, as I observed, threw little, if any, light. No connexion can be discovered between the prevalence of typhoid fever and variations of the atmosphere. It spreads, or is developed, indifferently, at every season of the year. As for the treatment, the French physicians generally adopt, to its fullest extent, the expectant method, placing more faith in the efficacy of hygienic measures than on the use of drugs.

After the Report, we had a smart skirmish between two distinguished members of the Academy, MM. Pravaz and Rochoux, which demonstrated, that medical men not only cannot agree upon the treatment proper for a given disease, but upon the facts on which their treatment is founded. M. Pravaz—possibly without being aware of it—has taken up the fag end of Dr. Ramadge's opinions, and

applied them to the treatment of pulmonary complaints. Instead of a serpent-shaped inhaler, however, M. Pravaz employs air compressed to two atmospheres, and with it professes to cure asthma, spitting of blood, &c.

According to M. Pravaz, this compressed air has three principal effects:—

1. It developes the pulmonary cells, and renders the lungs more permeable to air.

2. It facilitates *mechanically* the oxygenation of the blood.

3. The venous circulation is accelerated in proportion to the pressure, and venous congestions of the viscera are thus dissipated.

These divers conclusions were criticised severely by M. Rochoux. It was not, in fact, difficult to show, that, as the external and internal pressures are always equal, the capillary circulation must remain unaffected. Besides, the experiments of MM. Dumeril and Poisenille have demonstrated, that atmospheric pressure has no effect on the flow of blood in the capillaries. As to the pressure favouring mechanically the absorption of oxygen, it would equally promote that of the nitrogen, as M. Desportes happily observed.

The dilatation of the pulmonary cells is, then, the only point which remains; but, whether Dr. Rammage's serpent or M. Bravaz's condenser be best suited for this purpose, I do not pretend to decide.

HOSPITAL ASSISTANCE.

A very considerable modification is about to be made in the two enormous establishments of Salpêtrière and Bicêtre. The former of these hospitals contains 3,548 beds for indigent females; the latter 2,176 beds for indigent males. In pressing times, and during epidemics, the establishments are often crowded to a dangerous degree. Thus, during the late attack of cholera the beds were arranged four deep in the wards of Salpêtrière, and it was hardly possible to walk down a ward between them. It is, therefore, in contemplation to suppress 500 beds at Salpêtrière, and 300 at Bicêtre. The sum thus economised will be distributed in out-door relief. It is calculated that the suppression of the 800 beds will enable the corporation to allow 10*l.* per annum to 320 males, and 7*l.* 15*s.* to 533 females. The Poor-law principle is making rapid progress here. It is the only weapon to combat Socialism with.

IRELAND.

[Dublin Correspondence.]

The subject of Medical Charities is the one now most anxiously engaging the attention of the Profession in Dublin. The late announcement in the House of Commons, of a Bill for "the better Distribution, Support, and Management of Medical Charities in Ireland," has put every one in a state of expectancy. The chief points, of course, come before Parliament very soon, and it will be for the men of the Profession all through Ireland to be on the look out. Every inch of the country having been already mapped out by the Ordnance Maps and Poor-law Guardians, it does not require much of that very deep knowledge proverbially reserved for millstones, to see that an assimilation to the English system,—as foreshadowed already in the *Medical Times*,—is to be the main feature in the measure now promised. It would be very easy to give you the chief points of the new measure; but till subscribers in Ireland make it worth your trouble to enlighten them on such matters, it would be unfair towards your other readers. There are two or three things which should be, perhaps, kept in view and urged on the Irish Members; one, that the present holders of Dispensaries should not be disturbed, except provided for elsewhere; that the system of *tender*—such a disgrace to English Medical legislation—should not be introduced in the projected arrangement; that some proper *maximum* and *minimum* salary be struck, and that the duties of the relieving officer be well chalked out, otherwise the Medical man will have to perform half his duties. As to the matter of inspecting officers, I have too much faith in the good sense and propriety of the men in the country to recommend it; and yet I believe we are to have four of them. Two physicians or surgeons, with certain other lay functionaries, are to be "Commissioners of Health." These to appoint four others as Provincial Inspectors, and a Secretary also; so that there shall be no lack of the good things in the way of Government patronage. These are to parcel out the Dispensary districts. The expenses of these Institutions to be charged on the electoral division or divisions comprised therein. The Commissioners to declare the number, qualifications, and salaries of the officers to be appointed, and the members of the Managing Committee. The latter to consist of sundry rate-payers resident in the district, liable to pay 30*l.* Poor-rates; the *ex-officio* and elected Guardians, changeable of course every year. The Relieving Officer and Warden, as well as the members of this Committee, recommend the poor for medicine, and to be visited. All Infirmaries and Free Hospitals come under a somewhat similar arrangement. The Governors to pay, however, 50*l.* Poor-rates; the recommendation of fit objects to vest in them as well as in the Dispensary Committee, Relieving Officer, and Warden.

ACUTE NECROSIS.

Some time having now elapsed since room was afforded in your pages for the doings of the Pathological Society of Dublin, some of its late transactions in its recognised organ, lately edited so ably by Neligan, will be noticed with interest. The Museum of the Richmond furnishes the first case, one of acute necrosis of the tibia, proving fatal in one short month. The specimen was exhibited by Hutton; the subject a girl 14 years old. A few days previous to her entrance into hospital she was seized with sudden pain in the left leg, going through the entire tibia. There was also high fever; the limb swollen from the knee to the ankle with distinct fluctuation. Free incisions were made, followed by copious purulent discharge. Some amendment followed, but before a week everything portended the worst, and she died twenty-six days after admission. On a *post-mortem* examination, the rectum and sigmoid flexure of the colon were found ulcerated. The articulations of the knee and ankle contained a thick purulent matter; the cartilages almost completely destroyed by ulceration, as well as those of the knee-joint; extensive abscesses between the muscles. The tibia, at its lower part, was covered with a layer of new bone, continuous with the epiphysis of the old, passing up the limb and closely connected with it; in fact, Nature was as busy as she well could be repairing the mischief. The upper part of the bone was quite necrosed, and, on making a section of it, the disease was further revealed. The medullary membrane here, too, being quite dead, filled with unorganised pus and lymph. In a practical point of view, the case is one of great interest, exhibiting, as it does, the necessity of checking such attacks in their onset.

CALCULUS ORIGINATING IN FRACTURE OF THE SPINE.

Dr. M'Donnell exhibited a preparation of the spine, in which fracture had taken place. It was taken from the body of a soldier, who fell from a considerable height. He was brought into the Richmond Hospital complaining of severe pain in the lower part of the dorsal region on the least motion. Sensation and motor power of the lower extremities seemed lost; there was considerable projection of the spinous process of one of the last dorsal vertebræ; he complained also of retention of urine, and there was paralysis of the sphincter ani. After several curious changes, he died in six months. The most curious fact, perhaps, in the case was the formation of a calculus of ammoniaco-magnesian phosphate, the result of the spinal derangement. The poor man at first lost flesh very rapidly, with a pallid countenance, and was afflicted with intractable bed-sores. He rallied, however, after being in hospital, and for two months signs of amendment were very perceptible. He recovered slight motion of his limbs, and in about three months he was able to move the toes; his sensation also was improved, and the rectum and bladder became more obedient to his will. Bad symptoms, however, again appeared, bed-sores began to form, hectic set in, and he lingered out only a very short time. The result of the *post-mortem* was a fracture running nearly transversely in the last dorsal vertebra, the lower fragment displaced backwards; much less, however, than at first; the lower moiety of the spine appeared rotated on the upper; the spinal marrow nearly cut through and softened. The disease in its symptoms puts one in mind of the capricious paralysis mentioned by Chomel and Graves, depending, of course, on peripheral disease of the nervous system, where you have, first, exaltation of sensibility, followed by diminution; this by abolition, and this in its turn by the normal condition of the parts engaged. Here, however, was sufficient cause for his various symptoms. Among the other more marked features of the case, the bladder presented a condition of high inflammation and contractility; its coats much thickened, and containing a remarkable calculus, of the size of a kidney-bean, as already noted. The case is not without interest; the work of reparation seems to have been going on, and would lead us to look upon all such cases as not entirely hopeless. The connexion of paralysis with diseases of the kidney and bladder has been long recognized, but the actual formation of stone is rare, and leads to many suggestions whether this state may, oftener than we are aware, modify affections of even this very grave character.

CARIES.

Dr. Banks exhibited a specimen of caries in the petrous portion of the temporal bone. The subject of it, before coming into hospital, was deaf, and at one time had a copious purulent discharge from the ear. In hospital, he complained of pain in the forehead; very intense and intermittent; feveriah heat of skin; the pulse weak and very irregular, changing from 80 to 60, and as low as 54. He had delirium, became gradually heavier and more insensible, and died eighteen days after the first rigors and sickness. At the *post-mortem* the temporal bone was found highly carious—perforated in two places; a probe grating upon loose portions of it. The dura mater corresponding to one of the apertures was perforated and sloughy; the brain also dark-coloured, with a large abscess in the left middle lobe. There was also a large collection of "thick green and very fetid pus between the dura mater and the mastoid and petrous portion of the temporal bone, extending to the middle line posteriorly, and downwards nearly to the foramen magnum,"—a curious but instructive instance of the amount of mischief that may go on in this locality in a very few days. The abscess the Society seemed to consider of only five days' formation.

PNEUMONIA.

Dr. Aldridge exhibited a portion of lung presenting the ordinary characters of red hepatisation, with which, of course, your readers are familiar. The "exudation masses" of Vogel and Lebert were said not to be visible under the microscope, though dwelt on so particularly by these writers, but in their place the minute bodies known generally as corpuscles of tubercle. The matter effused on the intestines in typhus, Aldridge seemed to think of the same character. Dr. Gordon laid before the Society the particulars of another case not very different. He seemed to think there were two forms of this intractable disease, which required two different modes of treatment,—one the form of typhus that supervenes in typhus, erysipelas, &c., well described by Stokes and Hudson. The other first noticed in 1841; its anatomical character given by Corrigan. The case brought under the Society was remarkable for the frightful rapidity with which it went on to bronchial respiration and bronchophony, *without* previous crepitus!—the solidification beginning at the apex of the lung, and descending, contrary to the usual mode of progress in such instances. Cases of pneumonia of both kinds are indeed frequently met with, and but too often confounded.

SELECTIONS FROM FOREIGN JOURNALS.

DR. BERNARD ON THE PANCREATIC JUICE. (a)

It is easy to obtain the pancreatic juice of living animals. Those on which M. Bernard experimented were large dogs. Having exposed, by incision, the

(a) The memoir, of which we have given a complete analysis, obtained the Grand Prize of Physiology at the Anniversary Meeting of the Institut.

duodenum, and a portion of the pancreas, he made a small opening into one of the pancreatic ducts, and introduced a silver tube, destined to give issue to the secretion. The parts were then returned into the cavity of the abdomen, and the external wound closed by suture. A small Indian-rubber bag was now attached to the extremity of the tube, to receive the fluid. As the operation does not affect much the animal's health, the secretion goes on almost normally. In seven hours more than half an ounce of pure pancreatic juice was collected; but the quantity and quality of the fluid will vary according as the animal's stomach may be empty or in the act of digestion. The greatest quantity is obtained at the commencement of the digestive process. About two drachms per hour are secreted by a large dog. Should inflammation of the pancreas supervene, the fluid secreted is greatly increased in quantity, but so altered as to be unfit for experiment.

Characters of the Pancreatic Juice.—Healthy pancreatic juice is a colourless, viscid fluid, which issues slowly from the duct in syrupy drops, and soon foams on being agitated. It has no odour; its taste is slightly saline, like that of the serum of the blood. It has always an alkaline reaction. When exposed to heat, it coagulates into a concrete mass of remarkable whiteness. This solid principle is precipitated by nitric and sulphuric acids, the metalic salts, alcohol, &c.; and the precipitate is redissolved by the alkalis.

The pancreatic juice, then, has many of the chemical properties of albumen, but its physiological properties are quite different. Besides, it may be distinguished chemically from albumen, by the fact that the dried precipitate is soluble in water, whereas albumen, treated in the same manner, is nearly insoluble.

The pancreatic juice is, of all the secretions, the one which becomes altered most rapidly. When exposed for a few hours to a heat of from 104 to 140 Fahr., it emits a nauseous odour, and loses its property of coagulating. Summer heat or thunderstorms will alter it in a few minutes; hence it should always be kept cool.

Function of the Pancreas.—The function of the pancreatic gland is to furnish a juice which dissolves, or, in other words, prepares for digestion, the neutral fatty matters of the food.

This is easily demonstrated by experiment. It is unnecessary to describe the long series employed and recorded by M. Bernard. They prove, "that healthy pancreatic juice enjoys the property of instantly changing all the neutral fatty matters into a kind of emulsion, and subsequently converting them into glycerine and fatty acid." It is, besides, the only animal secretion which possesses this property. Bile, saliva, gastric juice, serum, and other fluids, when mixed with the fatty matters, exercised no influence on them.

The experiments were repeated in the presence of MM. Majendie, Rayer, Bouillaud, Andral, and Berard.

Action of the Juice during Digestion.—From the preceding experiments made with the pancreatic juice out of the living body, it seems admissible to conclude, that this fluid, by changing the fatty matters into an emulsion, renders them capable of being absorbed, and thus becomes the principal agent in the formation of chyle. This latter fluid, when perfect, always contains a certain proportion of fatty matter intimately mixed with it. In the stomach the fatty substances are merely liquefied, and not changed. Now, when the two pancreatic ducts of the dog are tied, the fat passes through the intestinal canal without the slightest change, and the lacteals contain a limpid chyle, which affords no trace of fat.

The rabbit, however, affords an opportunity of testing the fact in an elegant and convincing manner. In this animal, the pancreatic duct joins the intestine very low down, nearly fourteen inches below the opening of the gall-duct; and it is easy to demonstrate the existence of two kinds of chyle in the lacteals. High up they contain a transparent chyle; but immediately below the opening of the pancreatic duct, they hold an homogeneous and milky chyle, which contains the usual fatty principles.

The above conclusions are, it will be seen, diametrically opposed to those of Sir Benjamin Brodie, who maintains that chylification is effected through means of the bile. (b) Having tied the ductus choledocus in cats, and found that the lacteals no longer contained anything but a limpid chyle, without fatty matter, Brodie came to the conclusion just mentioned. But when Majendie repeated the same experiment on dogs, he did not obtain the same results, perfect chyle being formed, notwithstanding the ligature. The error of Sir B. Brodie may, perhaps, be explained in the following manner:—In cats the pancreatic duct joins the biliary duct before the latter opens into the intestine. Hence, it is very possible that Brodie tied the common duct, and thus cut off the supply of pancreatic as well as hepatic secretion. In dogs the two ducts are separate, and the experiments of M. Majendie are therefore more conclusive.

It would therefore appear to be demonstrated, that *bile* is not the grand agent of digestion, as British Practitioners have so long been taught to believe; and, if this be the case, what becomes of our blue-pill?

ON THE UNSTRIPED MUSCULAR FIBRES IN THE COATS OF THE BLOOD-VESSELS.

In the report of the progress of microscopic anatomy for the year 1847, the author, in referring to Kölliker's researches on the structure of these coats, took the opportunity of adducing grounds for the opinion, that that substance in the tunica media of the radial and popliteal arteries, which is capable of easy separation into small fibrous looking plates, is not to be regarded as unstriped fibre. He was led to this opinion, not only by the circumstance, that Kolliker's criteria are insufficient to distinguish these (superfluously named) "contractile cells," from many epithelial structures; but also especially by the results of treating the substance in question with nitric acid, at 68° Fahr.

Paulsen, in his Dissertation, showed, that after twenty-four to forty-eight hours' treatment with nitric or muriatic acid, unstriped muscular fibres show two quite characteristic phenomena; they separate with extraordinary ease into their elemental fibres, and the fibres have a spiral or winding form; and in this spiral winding, it may often be seen that the surface of the fibre takes the direction of its axis. Although this affords an admirable opportunity for studying the form and behaviour of the fibres, yet their great softness and brittleness renders some caution necessary. It is thus seen, that Kölliker's view of the form of unstriped fibre is, in the main, correct; although it is difficult to verify in fresh preparations. The unstriped fibres are produced at both ends into long points. Their length, while spiral, is, in the cat, about ·086 of a line, their greatest breadth is ·0035. In the guinea pig and rabbit they are somewhat longer. There are no indications of a cavity; and the author has never seen the knots described by Kölliker. Hence, he is disposed to regard them as produced by the curves sometimes occurring in fresh muscle. Generally, there is but one nucleus in the middle of the fibre; it is oval and flat, and, after treatment with nitric acid, is scarcely recognisable.

According to the author's observations, the unstriped muscle of the bowels is similar; variations being chiefly in its length and breadth. The two appearances—the breaking up of the tissue, and into spirally-twisted elements—are quite specific, and have never been seen by the author in applying the same test to the most different kinds of tissues. Thus, on the one hand, many epithelial structures are much bent by the action of the mineral acids, or are torn into splinters by violence; but their shape and size is irregular, and there are no such spiral or winding forms. While often a mere shaking of the preparation is sufficient to separate the muscle into fibres of a uniform shape. This latter circumstance is of especial value where, as often happens, the spiral twistings are less marked, or, from some unknown causes, are absent. And however these changes of unstriped muscle are produced by treatment with nitric acid, it is certain that they constitute quite a characteristic of unstriped fibre, and every microscopic observer may be glad that henceforth this tissue, so difficult to verify, may, by means of nitric acid, be distinguished from all others.

The author applied this method to the deciding on the presence of unstriped muscle in the coats of the vessels. Recent observations, and especially those of Weyrich, have shown him an error of his which he hastens to correct. Probably the acid which he used was too weakened by keeping to produce the characteristic appearances of the substance in question; and it may also have partly depended on the fact, that he laid rather too much stress on the spiral form, and too little on the easy separation of the tissue. Later experiments with stronger acid, however, showed this form. He has found such muscular fibres in the popliteal artery of the human subject, and closely resembling the rather longer ones from the umbilical vessels of a fœtal calf at the end of gestation. Their length was ·0417 of a line, their breadth in the middle was ·0027. So, also, he found them in the tunica media of arteries from the pia mater of one-sixth line in diameter. Here they average ·0278 of a line in length, and ·002 in breadth. *In their form, the unstriped muscular fibres in the coats of the vessels quite correspond with those of the intestine and uterus*, only they are shorter, their pointed ends not quite so longly produced, and their breadth somewhat less. In the aorta of the man and of the ox he has hitherto not been able to meet with any muscular fibres. In like manner he has vainly sought after the toothed unstriped fibres which Kölliker has discovered and described. These forms seem closely to resemble those splinters which can be obtained by tearing up the reticular tissues of different kinds; and if any one hereafter should assert, that epithelial tissues are the constant element of the coats of vessels, it must, nevertheless, be conceded, that the unstriped fibre is met with in considerable quantity in the tunica media of all arteries, from those of medium calibre to the capillaries. In the smaller vessels it often appears as if the middle coat consisted mainly of unstriped fibre.

The author cannot avoid calling upon inquirers to test, by this mean, the opinions of Kölliker on the distribution of the unstriped muscular fibres, (contractile fibre cells,) opinions so important in a physiological point of view. Unfortunately, Dr. Eylandt, from an examination of the skin, considers that the greater part, if not all, of Kölliker's statements cannot be confirmed, and that they seem to depend on the muscular fibres being confounded with other tissues.

(b) *Quarterly Journal of Medical Science*, Jan. 23.

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THE MEDICAL TIMES.

SATURDAY, APRIL 6, 1850.

There are few subjects of greater importance to the Profession than the principles and management of Medical Charities. Many judicious men have given the public and the Profession the benefit of their experience in reference to the operation of the Charities, Relief Societies, and Medical Clubs, which are now so rife throughout the country. Many sagacious ideas are hopelessly incarcerated in Blue-books, and many statesmanlike views slumber in dull pamphlets. The Press has groaned under the weight of complaints too heavy for the human bosom to bear, in silent tribulation. Reproaches have followed wrongs, in hot haste, and with

great relief to oppressed consciences, until some new iniquity has tripped up the heels of an old indignation. The abuses of Charities and Clubs have been standing grievances among medical men for many years past, and occupy a place in their antipathies, side by side with the grinding evil of Poor-law Practice.

We like to see the spirit of men roused against every social wrong, and we welcome each new burst of indignation as the promise of a certain reformation. Opinion must never stagnate. Justice has need of many servants to perform her work. It is every man's duty to enlist in her ranks, and to contribute to the achievement of her mission. When the army has swelled to its due magnitude, the battle is won. The Goliath will fall by the hand of some David, whose only weapon shall be a smooth pebble from the brook.

The system upon which our Medical Charities are conducted is highly injurious to the interests of the Profession. Our Hospitals and Dispensaries sap the foundations of independence, and, if they do not make paupers, at least pervert honest people into mendicants. Undiscriminating with respect to the objects of their bounty, they give to all who ask for aid; and, if decent respectability shall stoop to solicit an alms, the demand is frequently responded to with an alacrity that a more needy and deserving petitioner would not evoke. Our Hospital Surgeons have not unfrequently been shrewd enough to discover, prospectively, a long succession of fees behind the humble disguise of an out-patient, who wishes to get for nothing the advantage of the best advice. In this respect, the Profession is false to itself. The facility with which respectable tradespeople can procure medicines from a public Hospital is a gross abuse; and is a means, we have no doubt, of depriving the Profession of many thousand pounds of annual income. So severely is the pressure of this evil felt in some localities, that many medical men have desired that relief to out-patients should be discontinued, and the funds now consumed by such ministrations applied to the increase of accommodation for the in-patients of Hospitals. We are not prepared to adopt this opinion, without seeing a means provided by which those persons who would deservedly become the recipients of hospital bounty, might procure relief from other institutions. Dispensaries, organised upon sound principles, and managed with due regard to the true interests, both of the public and the Profession, would constitute such charities as we desiderate, and would be the instruments of removing many serious evils. Unfortunately, these institutions, in there present state, are as obnoxious to censure as our public hospitals, and aggravate the mischief they should be qualified to remedy.

An able and judicious pamphlet, entitled "Sanitary Economics," has been recently published by Dr. Alexander Stewart, in which that gentleman exhibits the various ramifications of evil incident to dispensaries as at present constituted and managed. We shall quote from his little book examples of the mode in which dispensary mismanagement *tempts* to meanness, deception, and improvidence. He says, "But what shall we say of the second class? Why, that *many* of them—I can depone to the fact—have long withstood the temptation held out to them by the Dispensary,—have availed themselves of it only after a painful struggle with their own inclinations, and would *never* have done so had there been any *via media* between private attendance and the receipt of alms. Often have I been spontaneously told, 'Indeed, Sir, we have always paid for attendance till now, and we did not like to send to the dispensary; but we've been forced to it; for we couldn't pay any longer.' But this is the first step of the *facilis descensus*; they have no scruple in returning to the dispensary, though a recurrence of sickness should find them in improved circumstances. This, however, it must be confessed, is seldom the case; for, once fairly reconciled to the idea of receiving public charity, the benevolent Society or the parish is thenceforward too often looked upon as superseding the necessity of economy and forethought, and as the appropriate refuge in any season of temporary pressure. As regards this and the third class of cases, I am persuaded, from instances that have come under my own observation, that thoughtless benevolence does much harm by actually *pressing* dispensary letters on the acceptance of those who were paying for attendance. The result of one such victory may be most disastrous. The neighbours all around begin to say, 'Why, if so and so goes to the dispensary, why should not we who are no better, or, it may be, much worse off?' And so the infection spreads, till one such case may have pauperised a whole neighbourhood. Here is a case in point:—Coming down stairs one day from visiting a lady, who occupied the second floor of a very nice lodging-house in a highly respectable quarter, I was thus accosted by the landlady, 'Well, Sir, if Mrs. —— is a fit patient for the dispensary, I shall know where to go when I'm ill next.' The lodger was, I believe, better off than the landlady, and what could I say."

Such instances might be multiplied to any extent, for we believe that two-thirds of the patients receiving medical aid from dispensaries are capable of giving a small remuneration, at any rate, to a medical man for private attendance. The suggestions thrown out by Dr. Stewart for the improvement of the system are worthy of consideration. He is an advocate of the self-supporting plan, and is a worthy coadjutor of Mr. Smith, of Southam, who has laboured incessantly for the amelioration of the existing system. Dr. Stewart does not commit himself to any particular scheme; but we think that if his suggestions were adopted, and a committee of the Medical officers of Dispensaries were formed, a comprehensive plan might be arranged, which would provide for the interests of the Profession, and subserve the wants of an impoverished and suffering community. If we can succeed in improving the character of Dispensary practice by limiting the patients to the classes that are really necessitous, and securing an adequate remuneration for the Medical officers, we shall also indirectly relieve the pressure that weighs so heavily on the Medical officers of Unions, and aid them in procuring for themselves better payment for their important and indispensable services. We have not space this week to indicate the advantages to the Profession at large which a reformation of the discipline of our Medical charities will induce, but we shall shortly return to the subject, and in the meantime trust that the Profession will help us with their counsel in devising a mode of excising the evils of the present vicious system.

MR. BARON ALDERSON'S DECISION IN A CASE OF QUACKERY.

An important dictum has lately been delivered by Mr. Baron Alderson, at the Liverpool Assizes for the present Spring. Any change or progress of the law of manslaughter, where death has been caused by mal-practice, must always be regarded with interest by the Medical Profession, both in its relations to the licensed practitioners and to quacks.

In ancient times, the law, while it regarded an accidental failure of practice terminating fatally as mere misadventure, in a regular practitioner, visited with great severity, in like circumstances, the unlicensed quack, holding him guilty of manslaughter in every case. About the time of Lord Hale a different principle came into operation, and "a person, whether he was a regular practitioner or not, who honestly and *bonâ fide* performed an operation, or administered a potion, which caused the patient's death, was not held guilty of manslaughter; but if he were guilty of criminal misconduct, arising from gross ignorance or guilty inattention, he was then guilty of manslaughter;" and, in a modern case, Lord Lyndhurst has held, "That in these cases there is no difference between the licensed and unlicensed. In any case, if a party, having competent knowledge and skill, by mistaken practice causes death, he is not thereby guilty of manslaughter; but if a person totally ignorant of medicine administers a violent and dangerous remedy, and causes death, proper medical assistance being at hand, he is guilty of manslaughter."

Thus, in modern times, considerable immunity has been extended to non-professional persons. The late dictum of Baron Alderson is nearly to the same effect. The following is the report:—

"George Winterbottom was indicted for the manslaughter of John Siddall, at Oldham, on the 10th of February last.

"Mr. Monk appeared on behalf of the prosecution, and Mr. J. Pollock for the prisoner.

"The prisoner, it appeared, was an ignorant man, and a cotton-spinner by trade, who, finding the trade of quack doctor more lucrative than his own, for the last two years had practised in the latter capacity on the good people of Oldham. He set up a shop in Royton-street, Oldham, and placed a sign over his door describing himself as an "herbalist," and advertising that he had medicated and renovating baths in his establishment. The deceased, it appeared, was in an advanced stage of consumption, and went to consult the prisoner, who recommended him to try his baths. This he did, and had several times hot vapour baths, and immediately afterwards cold shower baths, which appeared to give him some relief. On the 10th of February last the deceased had a hot vapour and cold shower bath, as usual, after which the prisoner prepared an emetic for the deceased, which he took. He became sick, and lay down. The prisoner told the deceased's uncle, who came with him, that he was in a fine sleep. On endeavouring shortly afterwards to awake him, however, it was found that he had taken his last sleep, for he was dead.

"Several medical gentlemen attended a *post-mortem* examination of the deceased, who all agreed that the

treatment he had received in his then state of health had caused his death.

"At the close of the learned counsel's opening, His Lordship stopped the case. There did not appear to him to be such a *mala fides*, or such an amount of ignorance as would amount to a *mala fides* on the facts opened, as would justify a verdict of guilty against the prisoner. If people were to be tried on the judgment of old practitioners for acting contrary to received notions, there would never be any improvement in medicine. The prisoner appeared to have acted *bonâ fide*, and, that being so, a late case had decided that the prosecution could not be sustained.

"Verdict.—Not Guilty."

Apprehensions having been expressed that the above case will give quacks an immunity to slay, kill, and experiment at pleasure, we shall now point out that it does not materially alter the law.

In a conversation with the prosecuting counsel in the course of the trial, the judge recognized the right of regular practitioners to try experiments in *hopeless* cases, with the *consent of the patient*, holding the practitioner free from blame if death ensued. The above case simply extends this immunity to the quack faculty. We do not think that this has the effect of giving an unlimited immunity to quacks. The case must be hopeless, and the patient's consent must be given. In the above case the patient was far advanced in consumption. An opposite decision would have furnished a possible precedent against the Profession itself. A physician making an improvement in medicine, of necessity tries an experiment; he acts on principles or reasoning unknown or foreign to the Profession; he is in that behalf an empiric; and thus any decision against empirics might be retorted on him. But Mr. Baron Alderson's decision proceeds on old legal grounds; he says there is no *mala fides*. Nor can we suppose any. Any man going to a quack in a desperate case knows hat he is submitting to experiment; his hopes may be disappointed, but he cannot be said to suffer under bad faith. If an unlicensed Practitioner represents his practice as experience when it is only experiment, that is *mala fides*, and punishable. An unlicensed Practitioner, using a successful system, might be properly punished for want of a license, but it would be unjust to found the crime of manslaughter upon an unsuccessful issue.

We do not see that this case gives any occasion for fear. If quacks were to be so severely visited, that every fatal case should be cause of punishment, quackery would gain ground by an assurance provided by law against any unsuccessful practice. The regular Practitioners would be regarded as the experimenters, and the quacks as acting on safe experience. The best cure for quackery would be, not an immunity, but encouragement to kill, provided humanity could look calmly on.

THE GENERAL BOARD OF HEALTH.

Some very important alterations have taken place in the constitution of this Board. Lord Ashley and Mr. Chadwick are now its only members. Lord Carlisle resigned the Presidentship when he left the "Woods and Forests." The Privy Council have refused to renew the order in Council, by which the Nuisances, Diseases, and Prevention Act was put in force; consequently the only Medical Member, whom the Bill brought into the Board, Dr. Southwood Smith, has been thrown out. We have also been informed, that the Superintending Inspectors, Messrs. Grainger and Sutherland, have been told their services are no longer necessary.

The Medical Profession, then, which was always kept in the background at Gwydyr House, is now altogether ignored, and Sanitary Reform is exposed to the danger of being swamped through the ignorance or the love of power of some of those who have taken upon themselves to administer it. We shall not, however, regret the changes which have taken place, if they lead the Medical Corporations, and especially the College of Physicians, to bestir themselves, and to reclaim from the Government the duties of Sanitary Administration, which belong to the Profession, and can be efficiently discharged only by the persons whom the Profession may depute.

We shall have more to say upon this subject hereafter.

THE GENERAL MEETING OF THE NATIONAL INSTITUTE.

We remind our readers, that the Public Meeting convened by the National Institute will take place on the 11th inst., at the Hanover-square Rooms, at half-past six o'clock, p.m. We hope that it will be largely attended; for the most valued interests of the Profession were never in greater jeopardy than at the present time. The Resolutions of that Meeting will decide the fate of the General Practitioners. If the large majority of the Profession do not exhibit a settled determination to be endowed with their inalienable corporate rights, in a College of their own, the Council of the College of Surgeons will obtain an easy triumph.

Let all *sound and true Reformers* haste to that meeting, and record their unswerving determination to be emancipated from the thraldom of a Collegiate oligarchy, who have, through a series of fifty years, insulted and betrayed the Profession, and reaped the honours and emoluments of unjust laws and exclusive authority. Every man who stays away from this gathering must, for the future, remain content with any amount of ignominy which the Council of the College of Surgeons may succeed in inflicting upon himself and his order.

THE PROSPECTS OF A REFORM BILL FROM THE COUNCIL OF THE COLLEGE OF SURGEONS.

The Council of the College of Surgeons appointed a Committee, a few weeks since, to consider and decide upon the principles which the Council might recommend to the Government as the basis of a general measure of Medical legislation. This Committee has had several meetings, and has, we understand, put together a pretty piece of Mosaic work, with which they hope to dazzle the imaginations of the Profession. We have been informed of the leading points upon which the Council are prepared to risk their character for prudence and liberality, but we shall forbear to dilate upon them, until they shall come before us in an official form. We promise the Council that we will do them *justice*.

THE NAVAL ASSISTANT-SURGEONS.

We are most happy to find, that a strong effort is about to be made to press the case of the Naval Assistant-Surgeons upon the attention of the Government. Captain Boldero, in all probability, will bring it before the House of Commons on Monday next.

The Honorable Member will not only have an excellent cause, to which his own high character will necessarily add weight; but he will be able to state to the House, that on one subject, at any rate, the Medical Profession are unanimous. It is well known that the Council of the Royal College of Surgeons had lately a personal interview with the Lords of the Admiralty, to express their decided opinion of the improper treatment to which the Naval Assistant-Surgeons are subjected. The College of Physicians are, at the present moment, circulating a Petition for signature among their Fellows. The Edinburgh Corporations have already represented their opinions; and Petitions are now in process of signature at the Dublin Colleges of Physicians and Surgeons.

To support these exertions of the Medical Corporations, every Medical School in London, and the great majority of those in the country, have petitioned, or are about to petition, both Houses of Parliament, to do justice to their brethren of the Royal Navy. Petitions have been already presented from the London Hospital by the Bishop of London and Sir William Clay; from St. George's Hospital, by the Marquess of Westminster and Sir De Lacy Evans; by the Bristol Medical School, by Lord Foley and Mr. H. Berkeley. Petitions from University College, signed by every Professor and Student, have, we understand, been forwarded to Lord Brougham and Sir James Graham for presentation. At King's College, Bartholomew's, Guy's, &c., petitions are being rapidly and numerously signed. At York, Oxford, Liverpool, the University of St. Andrews, Canterbury, Chatham, Manchester, Worcester, Leicester, Leeds, Guildford, Reading, Ipswich, Chichester, Brighton, Gravesend, Southampton, Exeter, and other towns which we need not enumerate, similar Petitions have been signed, and have been, or will be, presented.

If the Government and the Board of Admiralty resist this expression of opinion, we shall indeed be surprised. Nothing but the strongest conviction of the present hardships and indignities, under which the Naval Assistant-Surgeons labour, could possibly have drawn forth this unanimity of opinion from our Corporations and Medical Schools. When a whole Profession shows itself thus unanimous, and when the case has been so clearly and conclusively stated as this has been, the prejudices of a few Martinets who resist all changes, simply because they *are* changes, and not on account of their intrinsic justice, must give way. The Government have now an opportunity of conferring a great and substantial benefit upon the whole Profession, by removing the wrong done to a section of it; and we cannot conceive there can be a moment's hesitation, not only as to the expediency and policy, but also as to the justice, of granting the prayer of the Petitions.

If, however, the Government shall submit to be guided by the dicta of a few officers, who

have no sympathy for ill-treatment they have never felt, it is not difficult to predict the consequences. The Naval Medical service will become a marked one. Good men will not be found to enter it; even now, its attractions are not great; its pay is small; its pensions are long deferred; its duties arduous and severe. Yet, as has been pointed out by the able author of the "Exposition of the Case of the Naval Assistant-Surgeons," when a service has once been entered, there are many reasons why it should not be quitted. And formerly the majority of men who entered the Naval Medical Department were really ignorant of the kind of life they were about to lead. But now, thanks to those who have exerted themselves so much in this matter, every Medical Student in England knows that the Naval Medical service is an oppressive and an unhappy one. Almost every Medical Student has prayed the Government to improve it, and consequently there can be little doubt that the ranks of the service will find but few recruits, until such changes have been made as may appear to the Profession just and necessary.

THE *LANCET* AND THE FELLOWS OF UNIVERSITY COLLEGE.

A Supplementary Charter has been lately granted to the University of London, the provisions of which have given great offence to many of the Graduates. Certain of those gentlemen, who are Fellows of University College, are desirous of inducing this Institution, as being one of the affiliated Colleges of the University, to examine into the grounds of their disapproval of the New Charter. They have, therefore, circulated among the Proprietors of University College, a Letter, which, in the *Lancet* of last week, is made the ground of attack against that Institution.

The *Lancet* has not discovered, or has not chosen to observe, that the Circular Letter refers altogether to the University of London; and it has therefore committed the egregious blunder of stating that the Fellows of University College disapprove of the conduct of the Council of University College, whereas the expression of dissatisfaction relates only to the Senate of the University of London.

We trust, however, that the gentlemen who signed this Circular Letter, will come forward and protest against the erroneous and unjust interpretation which it has been made to bear.

MESMERISM, AND DR. BUSHNAN.

A writer in the *Zoist* for April, foams with indignation on account of the Article on that Journal that appeared in our Number for the 16th of February. In particular, his wrath knows no bounds when he touches on the tender subject of mesmeric feats, so sorely at a discount in our pages. He suspects Dr. Bushnan to be the Author of the Article in the *Medical Times*, and charges him with ignorance and impudence. We wonder a Mesmerist could be guilty of so every-day a feeling as mere suspicion. Surely he had an Okey at hand to point her telescopic eye into the midst of any man's thoughts, and wrest from him the inmost secret of his bosom! Doubtless, some one of the Okeys of Dr. Engledue's or Dr. Elliotson's *séances* might have pried into Dr. Bushnan's breast at the very moment he was said to be concocting his sarcasm on the vignette of the cover of the *Zoist*, and picturing it to himself as representing "Dr. Elliotson, disguised as a bearded sage, sitting down between the two Okeys, pondering on the book of Fate!"

Dr. Engledue quotes with much anger most of the sentence in which the passage just cited occurs; but his courage failed, and he did not encounter the whole. At the name of Okey it appears that the audacity even of a mesmerist evaporates. Dr. Engledue, however, is right—though he cannot boast of owing his knowledge to anything superior to vulgar rumour. Dr. Bushnan—the last man who would desire to shelter himself under the protection of the anonymous—*is* the author of the article in question; and we further inform Dr. Engledue that his opponent will not hesitate to enter the lists with him. Unless we are much deceived, Dr. Bushnan will supply him with facts tougher and more difficult of digestion than the flimsy and tender morsels with which Dr. Elliotson and his friends are accustomed to feed their fancy. In the meantime, we propose to afford our readers a specimen of the kind of facts which grow up under the fostering wing of the *Zoist*; and we beg to ask the Diocesan of the Vicar of Flixton, whether he thinks it becoming in a Minister of the Gospel to countenance such things as we are about to quote? We would, also, ask the Earl of Carlisle whether it be seemly that one who, like him, stands high in the councils of the earthly Head of the Church, should have his name employed to strengthen such a cause? Here is the specimen of the fruits of Mesmerism to which we refer:—"Lately published. The Celestial Telegraph; or, secrets of the Life to Come, revealed through Magnetism; wherein the existence, the form, the occupations of the soul after its separation from the body are proved by many years' experiments, by the means of eight ecstatic somnambulists, who had eighty perceptions of thirty-six deceased persons of various conditions. A description of them; their conversation, &c.; with proofs of their existence in the spiritual world."

This work was favourably reviewed in the January Number of the *Zoist*, by the Rev. George Sandby, Vicar of Flixton, Suffolk, who, at page 417, distinctly states, "*I can see no reason to question either the good faith of the Author or the credibility of his witnesses.*"

THE BRITISH MEDICAL FUND.

The Managing Committee of this Fund—erst Mr. Daniell's Medical Relief Society—have made their Report, which we publish in another column. It is deserving of the attention of the Profession. We are aware that the gentlemen engaged in the effort to establish this Society must have had many difficulties to encounter, and the Report shows that they have applied themselves to the task with zeal and assiduity. Although, on a former occasion, we took some exceptions to the scheme as then propounded, and ruffled the amiability of the Sub-committee, we shall not now withhold our meed of commendation when it may seem to be deserved.

Within the scope of its intentions, the British Medical Fund, in its improved character, is calculated to be of much benefit to the Profession. It provides for Deferred Annuities, a Superannuation Fund, a Widows' and Orphans' Fund, a Sickness Fund, and a Relief Fund, and the Report indicates in a general way the amount of premium to be paid for the acquisition of any one of these boons at stipulated periods. This is a fair and business-like proceeding, for in all transactions of this kind people like to know the terms upon which they may be enabled to purchase given advantages.

The Profession can now judge for themselves to what extent this Society will apply itself to their necessities. The mode proposed for forming a Directorate is unobjectionable, and will give confidence to the Profession.

Let the Committee look carefully to the foundations upon which it is to be built, and the Society will be safe. We hope it will be prosperous. They shall have from us a fair trial, and such encouragement as humane men devoted to a benevolent object deserve from the public Press.

REVIEWS.

Illustrations of the Effects of Disease and Injury of the Bones. By Edward Stanley, F.R.S.

A Treatise on Diseases of the Bones. By Edward Stanley, F.R.S., President of the Royal College of Surgeons, and Surgeon to St. Bartholomew's Hospital. London. 1849.

We believe neither interest nor ambition prompted the publication of these works. Their Author has already enjoyed the highest honours of our Profession; and his lucrative and extensive practice places him far above the suspicion of having been influenced by any meaner motive.

They have evidently been written with the hope of improving the practical usefulness of our Profession. We rejoice at their publication, not less from a consciousness of the motive that must have prompted their Author to his labours, than on account of their intrinsic merits. On the subject of which they treat, they are without a rival. Five and twenty years Mr. Stanley has had his attention especially directed to diseases of the bones. During that time he has enjoyed opportunities that fall to the lot of few. How ably he has used those opportunities, the works before us amply testify. Every page tells of the man of large experience—every remark is illustrated by example. Instead of attempting a review, we shall simply offer our readers a pretty full abstract of their contents.

The arrangement of his materials adopted by Mr. Stanley is eminently practical.

The Treatise is divided into four parts. The first treats of Hypertrophy, Atrophy, Neuralgia, Inflammation, Suppuration, Caries, Ulceration and death of Bone; the second of Tumours of Bone; the third of Rickets, Mollities Ossium, Scrofula and Hard Carcinoma in Bone; the fourth of Morbid growths from the Jaws, Diseases of the Bones of the Spine, and Diseases of the Periosteum.

Hypertrophy of bone is defined to be "an increase of size from the augmentation of its healthy tissue. The long bones, although rarely, are yet now and then increased in length as well as thickness. When the tibia is elongated, whilst the fibula undergoes no change, either the hypertrophied tibia becomes curved, or the ligaments uniting it to the fibula yield. Mr. Stanley says he has seen instances of both kinds of deformity. This elongation of one leg has been referred to disease in the

hip. It has to be treated as if the sound leg were shortened, *i.e.*, a high-heeled shoe must be placed on the foot of the sound leg. Hypertrophy of bone usually occurs in scrofulous subjects. It is frequently accompanied by thickening of the periosteum, and preceded by ulceration of the integuments over the bone. When hypertrophy affects the bones of the face, Mr. Stanley says, "it need not be a rule from which there should be no deviation, that, as the only justifiable ground of operation, the whole of the diseased parts should be taken away."

Local hypertrophy of bone may give rise to tumours having "the characters of genuine exostoses, but differing from them in having no primordial structure of cartilage or fibrous tissue."

Atrophy of bone consists in a diminution in weight. This diminution may arise in three ways: firstly, from a bone being simply diminished in size; secondly, from its walls being thinned, and its cells widened; thirdly, from the whole of its cancellous texture disappearing. The causes are—defective nutrition of the body generally, or of the bone atrophied only; the latter may be due to the supply of blood being cut off—to want of action of the bone and rickets. Bones arrested in their growth during childhood are classed by Mr. Stanley among atrophied bones.

Neuralgia of bone.—"By this term I venture to designate a class of cases in which pain arises in a bone, severe and lasting, unaccompanied by inflammation or other organic change in its tissue." Neuralgia of bone mostly occurs in females, and is often accompanied by other symptoms of hysteria. Its usual seat is the condyles of the femur, the head of the tibia, and the humerus—occasionally the shaft of the femur. The pain may be local, or diffused through the whole bone. It is increased by compression. There is almost total absence of abnormal heat, or swelling of the part. The remedies for inflammation have no effect on its duration. The general health suffers only in proportion to the pain.

Inflammation of bone is marked by redness and increased sensibility. The following is the order in which "the component parts of a bone reciprocate their morbid inflammatory actions":—

"Inflammation of the medullary membrane is followed by inflammation in the periosteum and outside of the bone.

"Moderate inflammation of the medullary membrane is followed by thickening of the periosteum, and by osseous deposits on the surface of the bone, with expansion and thickening of its outer lamellæ.

"Acute inflammation of the medullary membrane is followed by ulceration of the periosteum, by suppuration beneath it, and by ulceration of the surface of the bone.

"Inflammation of the periosteum is followed by thickening of the inner lamellæ of the bone."

Inflammation of bone may give rise to:—

a. Enlargement by expansion of its tissue.

This is one of the most frequent alterations to which bone is liable. The lamellæ of the bone are separated, its vascular canals widened, and its cells enlarged. Either the compact or cancellous tissue may be thus affected.

b. Enlargement, with induration of its tissue.

This is the effect of prolonged inflammation. The lamellæ of the inflamed bone are first separated and its cells widened, and then the lamellæ become thickened, hardened, and consolidated together. "Local injury is occasionally the cause of enlargement and induration of bone; and I have known," adds Mr. Stanley, "a blow upon the head to be followed by thickening with induration in the bones of the cranium. The most common cause by far, however, is rheumatism. Medicine has no effect on enlarged and indurated bone. For the tenderness and irritation of the periosteum which precede and accompany the morbid changes in the bones, the local application of mercury to the limb, and the internal administration of iodide of potassium and sarsaparilla are of the greatest benefit.

c Enlargement of bone by osseous deposits on its surface.

This results from inflammation over its periosteum. A "gelatinous substance is deposited on the surface of the bone, and becomes cartilaginous and then osseous. A thin layer of bone is thus formed between the periosteum and the bone, to both of which it is united by vessels. At first the osseous layer may be readily peeled off the bone, but afterwards is inseparably united to it."

Rheumatic and syphilitic inflammation of the periosteum are among the most frequent causes of this deposit. To this head Mr. Stanley refers those bony deposits on the skulls of pregnant women so minutely and accurately described by M. Ducrest, in the second of the "*Mémoires de la Société Médicale d'Observation*;" not *d'Emulation*, as, by some error, has crept into Mr. Stanley's note.

On the Treatment of Inflammation of Bone.—In addition to the usual remedies for acute inflammation, abstraction of blood, warm poultices, or cold lotions, rest and position, Mr. Stanley recommends "mercurial ointment to be constantly and plentifully applied to the surrounding soft parts."

"There is, besides," he adds, "an internal remedy which never fails to assist in the removal of inflammation from bone. This is iodide of potassium."

When the medullary membrane is the seat of acute inflammation, mercury should be given internally, so as to affect the system. Calomel and opium is the combination Mr. Stanley prefers:—

"Of the power which the constitutional action of mercury has to arrest acute inflammation in bone," he adds, "I am well assured by experience."

With respect to the employment of counter-irritation in the treatment of the diseases of bone, Mr. Stanley lays down the following rules:—

It is never to be employed while the inflammatory processes in the soft parts around the diseased bone are active.

It is not to be applied where there is much suppuration from the soft parts around the diseased bone.

Suppuration in bone may be circumscribed or diffused.

The usual seat of circumscribed abscesses is the articular ends of bones. They are rarely the result of local injury. In some cases a deposit of tubercle precedes the circumscribed abscess in bone, and then the cavity left after the evacuation of the matter is analogous to the tuberculous cavity in lung.

Diffuse suppuration through the cancellous and medullary tissue is usually a most formidable disease. It frequently arises from local injury. Notwithstanding the evidence of Cruveilhier, Carswell, Reynaud, and Mr. Philips, Mr. Stanley thinks "that suppuration through the medullary tube of a bone after amputation is not a frequent occurrence."

A diagnosis may be formed between neuralgia of bone and abscess thus:—

The neuralgic affection has the following special features—the hysteric character of the constitutional symptoms; the pain not confined to a limited district of bone, and not aggravated by motion, occasionally attacking the corresponding bone of the opposite limb, and not yielding to depletory or sedative remedies.

Perforation of the bone is the remedy for suppuration in its substance. The surface of the bone is to be laid bare by a scalpel, and then a small trephine used; the chief seat of pain being the spot selected.

Caries—the condition of bone ensuing from suppuration in its cancellous Texture.—It will be observed by this, that Mr. Stanley regards caries and ulceration as two distinct processes.

The following are the phenomena of caries. The bone itself is very vascular; then its cells are filled with a reddish brown fluid, apparently a mixture of blood and pus, and occasionally combined with oily particles. Absorption chiefly of the animal parts of the bone ensue, the remaining part being fragile, and of a grey, brown, or black colour. The inflammatory action which precedes caries being of a languid character, depletory remedies are of little use, except in reducing the inflammation of the soft part around the diseased bone. A free outlet, by means of incision through the soft parts, is to be given to the pus. All local application ought to be of a soothing nature. The strictest quietude is necessary. The question of amputation or removal of diseased portion of bone must be decided by the particulars of each case.

Ulceration of Bone.—The result of simple inflammation begins at a simple point, and spreads equally in width and depth. Syphilitic ulceration usually begins at many points, distinct yet close together, giving to the surface of the bone a worm-eaten appearance.

Malignant ulceration of bone is irregular in outline and surface.

Primary ulceration of the head of the femur constitutes a peculiar disease of the hip-joint, rarely if ever seen in children. It is often the result of local injury. It is essentially a chronic disease, continuing for months or years. "In some cases of ulceration of the head of the femur, experience has proved," says Mr. Stanley, "that immediate and complete relief has followed the removal of the ulcerated bone."

Necrosis.—Death of Bone during the Life of the Rest of the Body.—The seat of necrosis is the compact, much more frequently than the cancellous structure. An exception must be made, however, in favour of the head of the tibia. In detailing the phenomenon of exfoliation, Mr. Stanley follows Hunter, Goodsir, Bransby Cooper, and Miescher. With respect to the reproduction of bone, he supports the doctrine, that regeneration of the shaft of a bone is effected chiefly by the periosteum; but he also allows that, under certain circumstances, the other soft tissues around dead bone may take an active share in the production of new bone.

The remainder of the chapter on necrosis, one of the longest in the book, is occupied with practical remarks on the peculiarities of necrosis, as it occurs in different bone, and in different parts of the same bone. The section on the Treatment is, like all Mr. Stanley says on the subject of treatment, admirably practical, evidently drawn from long-continued and careful observation, sound judgment, and deep thought. It is incapable of condensation.

[To be continued.]

THE BRITISH MEDICAL FUND;
FORMERLY
NATIONAL MEDICAL ANNUITY AND RELIEF FUND SOCIETY.

Report made by the Managing Committee of the above Society, at a Meeting of the Provisional Committee, at the Freemasons' Tavern, on Saturday, April 23, 1850,

Dr. FORBES in the chair.

The Managing Committee, in accordance with the resolution passed at the last meeting of the Provisional Committee, authorising them to organise the Society on a new basis, have deemed it expedient to call the present meeting of the Provisional Committee, in order that they might report the steps they

had taken, the modifications of the plan proposed in the former Report they would recommend, and the manner in which they deem it advisable to proceed to the completion of your design in this Institution. On behalf of the Treasurers appointed at your former meeting, they have first to state that a sum amounting to 423*l.* 0s. 8d. has been paid over by the late Treasurer, Dr. Robertson, of Northampton, to the banking-house of Sir Claude Scott and Co., where an account has been opened in the joint names of Mr. Propert and Mr. Squibb, and that a further sum of 5*l.* 6s. 2d. remains in the hands of the late Manager, Mr. Daniell; that these two sums constitute the entire balance belonging to the Society after the payment of all debts, and the discharging all obligations up to the period of the appointment of the present Managing Committee. This sum has since been reduced by the amount of 14*l.* 11s. 5d., by expenses necessarily incurred for postages and other petty expenses requisite for the working of the Committee of Management.

Immediately upon the commencement of their duties, the Managing Committee found it to be indispensable that a Secretary should be appointed, and suitable apartments provided for their meetings and the transaction of business generally.

In the printed Report before alluded to, the name of Mr. Hawtayne occurs, as a gentleman who had expended much time and attention upon a design for a Medical Annuity Society, and that gentleman, having offered his services and valuable suggestions to the Managing Committee, whilst the Society should be in progress of formation, gratuitously, they have been happy to avail themselves of this offer, and they beg publicly to express their sense of the value of his zeal and exertions in their service. Subsequently, the Managing Committee authorised Mr. Hawtayne, as their Secretary, to engage apartments at 52, Regent-street, which apartments are accordingly now occupied in the service of the Society.

In reference to this and other items of expenditure, the Managing Committee would observe that it has appeared to them most consistent with a judicious economy, to adopt without hesitation the measures most conducive to the immediate success of the Society; and they feel that it would be impossible to make any progress without considerable preliminary expenses. In this application of the sum already subscribed, they recognise the only course which can secure to the subscribers a suitable return, the completion of their design in a firmly and widely-established Relief Fund.

Using the discretionary power conferred on them by the resolution of the Provisional Committee, the Managing Committee, consisting of Dr. Forbes, Mr. Daniell, Dr. Webster, Mr. Squibb, Mr. Bird, Mr. Propert, Mr. Headland, and Dr. Gardner, have invited four gentlemen to join them; namely, Dr. Babington, Dr. J. Risden Bennett, Mr. Benjamin Phillips, and Mr. Hancock, who have kindly consented to act with them.

Before stating to you the several points involved in the plan the Managing Committee are prepared, after much deliberation, to recommend to your approval, they would observe, that they feel themselves bound immediately to carry out one recommendation in the former Report, namely, that of submitting an outline of their plan to a limited number of gentlemen, for the purpose of inviting their co-operation as members of the Provisional Committee, with the ultimate design of sending the matured plan to every member of the Profession, sanctioned by a goodly number of names belonging to all its branches. In this preliminary proceeding, the Managing Committee could limit their application only on one principle, namely, that it should be made to every Hospital Physician and Surgeon both in London and the provinces, and to such other gentlemen whose names are more publicly prominent, and likely to promote the object immediately in view.

The number of gentlemen who have approved the sketch forwarded them is 312, of which number 270 have consented to place their names upon the Provisional Committee, and it is most gratifying to the Managing Committee to state that some who, for various reasons, have declined to place their names upon the Committee, have expressed themselves favourable to our design, promised to become members of the Society when established, or to present donations to the Relief Branch.

The first point which the Managing Committee would bring before you is one of primary importance: it is this,—that the Society should be formed on as broad a basis as possible, and should assume, amidst all its variety of objects, a distinct unity of form and purpose; and, with this view, they strongly recommend that its operations should be exclusively conducted by, and restricted to, members; membership being made to consist in the subscription of one guinea annually, or of ten guineas in one sum, no one being allowed to subscribe for annuities until enrolled as a member, but no obligation remaining on the subscriber for annuities to continue any annual contributions beside his premium of annuity.

With respect to the donors and subscribers under the former management, it is recommended, that those who have already subscribed 10*l.* 10s. or upwards to the Society shall continue to be life-members, and that the same privilege shall be enjoyed by those who, having paid less than that amount, shall make up their subscriptions, in one payment, to the same sum of 10*l.* 10s. Thus, subscribers who paid for three years an annual guinea, shall become life-members on payment of 7*l.* 7s.; those who have subscribed 5*l.* 5s., on payment of 5*l.* 5s., &c.

After discussing a great variety of ways in which annuities might be contemplated by the Society, and be acceptable to the Profession, the Managing Committee thought it would be highly expedient to consult with an actuary, and, as Mr. Neison had been the adviser of the former Committee, and as no man stands higher in his profession, or is more likely to gain the confidence of the subscribers, they deemed it most proper to obtain his assistance in determining the nature and form of the annuities, with what limitations they should be accompanied, and, on the whole, should best combine, at once safety, simplicity, and usefulness.

In order to be put in possession of satisfactory data to enable them to go before the Profession, it was necessary to obtain Tables accurately to define the cost of every form of annuity they would decide upon adopting. And they have much gratification in stating, that the various annuities, which they consider will meet the exigencies of the Profession, providing a competence for members themselves, their widows, or orphans, may be secured by the payment of annual premiums which, compared with the amount necessary to effect assurances of sums payable at death, are highly favourable to the plan of annuities.

The Managing Committee, therefore, recommend, that the Society shall contemplate a fourfold purpose, and shall embrace—

1st. An annuity branch, to grant deferred annuities, that is, a provision for members themselves, who may subscribe for any sum from 10*l.* to 100*l.* per annum, to commence at any age from 50 to 70, to continue for the rest of their lives.

2nd. A Widows' and Orphans' Fund, for granting reversionary annuities, which will enable a member to subscribe for similar sums, of from 10*l.* to 100*l.* per annum, as a provision for his widow and orphans.

3rd. A Sickness Fund, similar in its objects and operations to ordinary benefit Societies, by means of which the subscriber of a small annual premium may ensure to himself a certain provision during any period of sickness or disability up to the age of 70.

4th. A Relief Fund or benevolent branch, to afford to members of the Society in any of those numberless contingencies and misfortunes which beset members of the Medical Profession, such assistance as the case may demand, or the Managers of the Society consider needful.

The gentlemen of the Provisional Committee now present, will, probably, perceive a slight discrepancy between the printed paper by which they were invited, and this enumeration of its objects.

The Managing Committee would, therefore, explain, that, on repeated consultations with the Actuary, they became convinced that it would be inexpedient to allow the first clause in the paper alluded to to remain; namely, that proposing to confine the annuities to members becoming permanently incapacitated. They found that data are altogether wanting to meet that contingency taken by itself; whilst, by combining with it that of temporary incapacity from sickness of any kind, the data derived from a great number of friendly Societies could be available. And the combination would greatly increase the value of the Society, and augment the number of subscribers.

The first branch of the Society then contemplates granting to members deferred annuities of from 10*l.* to 100*l.*, to commence at any specified age from 50 to 70, with the additional provision, that should the subscriber become permanently incapacitated from following his Profession before the stipulated age, he shall be entitled to a proportionate annuity, to commence at the period of incapacity.

The Managing Committee, as before observed, is in possession of tables upon which these annuities can be purchased by persons at all ages, but, as examples, it may be stated, that the sum of 50*l.* a year, to begin at 65, and to be payable during the rest of the subscriber's life, may be secured by any one entering at the age of

	£	s.	d.		s.	d.	
25	for 3	3	5	annually, or	1	3	weekly.
35	„ 5	14	0	„	2	2	„
45	„ 11	11	1	„	4	5	„

Again, if the annuity of 50*l.* a year begins at 70, then the payments will be, respectively, for a subscriber at the age of

	£	s.	d.		s.	d.	
25	1	13	2	annually, or	0	7½	weekly.
35	2	18	3	„	0	10½	„
45	5	12	1	„	2	2	„

The second branch of the Society may be designated

THE WIDOWS' AND ORPHANS' FUND.

It is intended to include,

1. Annuities to widows, on the principle of survivorship; that is, to commence immediately on the death of the subscriber, one-half of the annuity to be deducted in case of the widow's marriage.

As examples of this class of annuities, it may be stated, that members subscribing at the age of

				Per annum.	Weekly.
		£		£ s. d.	s. d.
30	Wife's age	25	for 50 pays	11 12 8 or	4 6
30	„	30	„	10 11 9 „	4 1

2. Annuities to children, individually, on the same principle of survivorship, the respective annuities to cease entirely on the marriage of the females, or on the coming of age of the males.

Examples.

Member's age.				Per annum.	Weekly.
				£ £ s. d.	s. d.
30	Son	1	for 25	2 13 9 or	1 0
—	Daughter	1	„	3 16 9 „	1 6
40	Son	1	„	3 10 6 „	1 4
—	Daughter	1	„	5 8 0 „	2 0

3. Family annuities to be granted to all the children of a family conjointly, on the same principle of survivorship, and with similar limitations.

In illustration of the importance of the Sickness Fund, the following examples may suffice:—

A member, aged 30, wishing to secure provision for himself during sickness, at the rate of 50*l.* a year, the provision to cease on his attaining 70 years of age, will have to pay 1*l.* 15s. 11d. per annum, or about 8½d. a week.

A member aged 50 will have to pay 3*l.* 16s. 10d. per annum, or about 1s. 6d. a week, and so on.

By the advice of the Actuary, the allowance to members subscribing to the Sick Fund ceases at the age of 70. This, it appears from the experience of numerous Societies, is an indispensable condition on many grounds. It is difficult to discriminate after that age between infirmity and sickness, unpleasant discussions are likely to arise upon claims, and great complications in the management are produced, all of which are avoided by the arrangement in question. But, in order to avoid the failure of an expected means of support at the age of 70, the subscriber to the Sickness Fund can provide himself with a deferred annuity to commence at 70, at a very low cost.

Thus, a member aged 30, subscribing 1*l.* 15s. 1d. per annum (about 8½d. per week) to the Sickness Fund, will secure, until he is 70 years of age, provision during sickness, at the rate of 50*l.* a year, whilst incapacitated by sickness or accident.

And if he would secure the same sum of 50*l.* during the rest of his life, whether healthy or sick, commencing at 70, he accomplishes this by purchasing a deferred annuity, for which he pays 2*l.* 3s. 8d. per annum. Thus these two objects, so important to every prudent and provident man, can be accomplished for 3*l.* 19s. 7d. per annum, or about 1s. 6d. a week.

The Managing Committee need say no more in recommending so obvious a benefit to the adoption of the present meeting and the Profession at large.

THE RELIEF FUND.

With respect to this branch of the Society little need be said. Its main objects are, to administer relief in cases where the provisions, made through the medium of the Provident Branch, have failed through inability to be carried out; or, if carried out, have proved inadequate to meet the necessities of particular cases; and also to extend relief, under peculiar circumstances, to the widows and orphans of members who have not been subscribers for annuities.

It is intended to form this Fund out of the annual and life-subscriptions of members, and from donations, bequests, and all other means whereby charitable Institutions are supported. Among the many objects contemplated by this branch of the Society,

the following have been particularly considered by the Managing Committee:—

1. To grant advances to such of the subscribers for annuities as may be unable, from sickness or other causes, to pay their premiums when due.

2. To make donations to members who may be disabled by disease, or otherwise in reduced circumstances.

3. To grant relief, under similar circumstances, in special cases, to the widows and orphans of members.

4. To augment, by annual grants, the annuities of widows or orphans, when, from particular circumstances, they are found inadequate.

5. To grant loans to members of a certain standing, at low rates of interest, or even without interest, under special circumstances.

6. To grant sums for building, or assisting to build, or otherwise providing cottage retreats for decayed members or their widows.

The last two measures, of course, cannot be contemplated until the Fund has attained a considerable amount of capital, unless special gifts or bequests be appropriated to either of them.

On the subject of the annuities, the Managing Committee would further observe, that the first kind, namely, simple deferred annuities, may be subscribed for as soon as the Society is enrolled, without regard to the number of members subscribing for such annuities.

But before reversionary annuities, *i. e.*, those to widows and children individually, or families, can be granted, it is necessary that a certain number of subscribers to this form of annuity should be obtained. The Managing Committee would, therefore, recommend, that in presenting the plan of the Society to the Profession, they should be authorized to announce that a registry is opened on the books of the Society for members who wish to avail themselves of this means of providing for their widows and families, and that such annuity or annuities as every member may wish to subscribe for, under any of the three heads, will be granted and secured to him so soon as the total of members subscribing shall amount to 250, that is, for reversionary annuities collectively. And in like manner they would recommend that the Sick Fund be not brought into operation until 200 members have given in their names as being ready to subscribe to that Fund, and for which, also, a registry should be opened.

And the Managing Committee have pleasure in stating that the Tables upon which annuities, both deferred and reversionary, can be granted, although they are really highly favourable to subscribers, are of such a character, that should any unforeseen difficulties arise which should render it needful to dissolve the Society, arrangements can readily be made to secure the interests of the subscribers by transferring them to other and long established institutions. It must never be forgotten, that in the subscriptions from life and annual members, the Society will possess a guarantee fund, the contemplated use of which will amply secure the interest of every subscriber for annuities.

Subscribers for any of the reversionary forms of annuities or Sickness Fund must be in good health at the time of first subscribing, or, if in delicate health, must consent to have the proper value set upon the life, in regard to its probable duration.

The Managing Committee have not deemed it necessary at present to provide a complete plan for the management of the Society, but as a first step they adopted the following resolution, relative to the number of the governing body, namely—

That the Society shall be governed by a Board of Directors, chosen by the members from among themselves.

That the Board shall consist of not less than twelve, nor more than fifteen, of whom one-third shall retire annually.

Should the plan now developed meet with the approval of the majority of the present meeting, it is intended to submit it to the Profession at large, and to invite every member, individually, to join the Society. The Managing Committee, therefore, if re-appointed, will, as soon as possible, prepare a body of rules and regulations for the future management of the Society, to which it will be desirable to obtain the sanction of a general meeting of members.

The Managing Committee are in possession of information relative to the intention of Government respecting Friendly Societies, which will make it highly important to enrol the Society without delay, and, for this purpose, they propose to frame such rules as are requisite for this purpose, and which, together with the remaining rules, will in due time be submitted to the members generally.

In conclusion, the Managing Committee, considering the advantages of a designation for an Institution being of such a kind as to admit of ready abbreviation, by the adoption of a portion of its title, propose to alter the present title to that of "The British Medical Fund, a Provident and Relief Society for Medical Men, their Widows, and Orphans."

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

March 26, 1850.

Dr. Addison, President, in the chair.

THE LATE EXPULSION OF A FELLOW.

A letter was read from a late Fellow, whose name, for obvious motives, we conceal, explaining the causes which led to his non-payment of last year's subscription prior to the anniversary meeting, and praying to be re-admitted, pledging himself to pay both the last and present year's subscriptions, if re-elected.

The President announced, that the ballot would be taken on the question of the re-election at the next meeting, and he trusted it would be decided in favour of the applicant, as the reasons he alleged for the non-payment of his subscription were very satisfactory.

A CASE OF SUPPURATION IN A HYDATID CYST OF THE LIVER,

IN WHICH THE ABSCESS OPENED THROUGH THE LUNGS, AND ONE IN WHICH HYDATIDS WERE EXPECTORATED.

By THOMAS BEVILL PEACOCK, M.D.,
Assistant Physician to St. Thomas' Hospital.

The first case was that of a female, 20 years of age, who was a patient of the Royal Free Hospital in August, 1848. When first admitted, she presented the ordinary symptoms of the form of bilious remittent fever, then prevalent; but, after a partial recovery, she was suddenly seized with violent pain on the right side, dyspnœa, and suffocative cough, soon followed by expectoration of matter, which had a deep bilious colour, and very fetid odour, and was evidently derived from an abscess in the liver. She sank on the thirty-seventh day after her admission; and, on examination, a large cyst, containing a thick, purulent fluid, with a collapsed acephalocyst, was found in connexion with the upper surface of the liver, and had perforated the diaphragm, so as to come in contact with the lower portion of the right lung. The lung was extensively consolidated, and in places gangrenous. Two other cysts were found in the liver, and one of these had also suppurated. The fluid in the other was deeply tinged with bile. The second case was that of a man, 31 years of age, who had for some months been a patient at the City Hospital for Diseases of the Chest. He had for some time before he applied there been much out of health, suffering from pain in the right side, with severe suffocative cough and profuse expectoration of yellowish coloured matter, with which were mixed shreds of membrane, which proved to be portions of hydatid cysts. He had a considerable enlargement of the right side and evidences of a cavity there. He continued to expectorate the hydatids for several months, but under a tonic course of treatment his health had materially improved, and for ten weeks he had been entirely free from the expectoration, and there seemed every reason to anticipate his recovery, though the cyst, partly contracted, and nearly empty, still remained.

After narrating these cases, Dr. Peacock alluded to other similar cases which had been reported, and showed that the result had, in most of the examples, been favourable.

Dr. C. J. B. Williams complimented the Author on the great care and attention with which he had watched cases which occurred so rarely, and also on the admirable manner in which they were detailed. He had himself seen three or four cases, but their history was imperfect. There were, however, two or three things which he thought worth attention. In one of the cases, the existence of hydatids was diagnosed by the expectoration occurring by fits and starts; the chest symptoms and the expectoration remained for some time in abeyance, and then considerable irritation arose, with violent cough, and expectoration of hydatids mixed with pus. This case he was unable to trace to its termination, as the patient left the hospital, and he lost sight of him. Dr. Williams then drew attention to the remarkable difference in the symptoms of hydatids in different cases; in some, the symptoms were very prominent and intense, leading to disease of a serious character, and ultimately to death, by the destruction of the surrounding tissues. Again, on the other hand, every one accustomed to examine bodies after death, has met with hydatids, the existence of which was not suspected during life. This is one of the mysteries of pathology which we are unable to explain. In most instances of cysts of any size, and of ancient date, the cyst contains a large quantity of putty-like matter, which it is difficult to distinguish from softened tubercular matter; this was the case in an instance of hydatids of the liver, where there was not any trace of tubercular matter in any other organ. This matter is found in different degrees of organization in the cyst containing the hydatid, and it appears to be an attempt to circumscribe their growth. The outer part dies and degenerates, passing into a condition like softened tubercle, or it may suppurate. Under the microscope, it was found to consist of fat in different forms, with abundance of the rhomboidal scales of cholesterine, and fat globules, and with traces of the elementary tissues in the cyst itself. He wished to ask Dr. Peacock whether he had made any observations on this material?

Dr. Todd remarked that Dr. Williams had overlooked the development of hydatids in the mucous membrane of the biliary ducts, and not in or between the blood-vessels, by which may be given a more simple explanation of the formation of that material. The hydatids formed in these ducts, by their gradual enlargement, distend and dilate them; they are surrounded by bile, which finds its way into them, and thus are discovered the traces of bile in the putty-like material, such as cholesterine and fatty matter, and he (Dr. Todd) thought a very careful microscopic examination would lead to the detection of bile-cells in it also.

Dr. C. J. B. Williams said, in explanation, that the hydatid he alluded to was not in the incipient stage, as Dr. Todd imagined, but was a large one, containing half-a-pint of matter. Cholesterine, fatty matter, &c., had been found in hydatids of the lungs, and also in old pultaceous deposits in other parts, to which Dr. Todd's theory would not apply.

Mr. Cooper agreed in opinion with Dr. Williams. He could not admit, as did Dr. Todd, that hydatids formed in excretory ducts. He then narrated a case of hydatid in the gluteal region, following a fall on the part fifteen years previously. The tumour had, during the last three or four months, increased rapidly in size, and occasioned considerable inconvenience and distress. Fluctuation was evident. He punctured it, and let out a limpid, colourless fluid, of low specific gravity, 1004 he thought. It contained chloride of sodium, with small traces of phosphate of lime. Mr. Hilton, who examined it at his request, said it was very like the fluid contained in the spinal sheath; but the tumour was not situated in the mesial line, and so large a quantity of that fluid could not have been drawn off, without causing serious symptoms. Under the microscope multitudes of echinococci were discovered, and it was then ascertained to be an hydatid. The application of heat and of nitric acid caused only a slight cloudiness in the fluid; no albumen was thrown down. Before he made this discovery, he had intended to pass a seton through the tumour, or to inject it; but he had seen instances of such violent inflammation follow that practice, that he hesitated about adopting it. He would be glad to hear from the Society what plan of treatment should be adopted in such a case?

Dr. T. Thompson said, that the question asked by Dr. C. J. B. Williams depended on the vitality or death of the hydatid. While alive, the animal caused irritation only by the inconvenience resulting from its presence and growth, but symptoms indicative thereof were not in general set up until after its death. When that has occurred, unless it is separated from the adjoining tissues by a particular cyst, it causes great irritation. He concurred in the opinion with Dr. Todd, that hydatids do occasionally form in the biliary ducts. A few years ago he saw a man who complained of pain in the

chest; there was dulness on percussion, but the lungs were sound. The liver was enlarged, and encroached on the cavity of the chest. From certain circumstances he had reason to believe in the existence of hydatids. The evacuations were devoid of bile. After a time, small hydatids passed away by the rectum, without any diarrhœa. The animals were small and charged with bile. From there not being any attendant diarrhœa, nor pain in the abdomen, and their being deeply stained with bile, he was led to the belief that their habitat had been in the excretory ducts of the liver. After these had come away, there was still deficient respiration in the lower part of the chest, and hectic set in, with great emaciation, and the case for a long while appeared hopeless; but the patient, by means of a good constitution and dietetic tonics, ultimately got round. In the paper the question was proposed, how far are we justified in giving a favourable prognosis in these cases; that is, in hydatids of the liver, communicating with, and discharged through the lungs? He (Dr. Thompson) thought that where the hydatids were of considerable size, the prognosis must be unfavourable, and he related in proof of this the case of a [soldier, who was tapped two or three times for ascites, and who expectorated hydatids through the lungs. When he died, there was found an ulcerated opening in the diaphragm, large enough to pass the fist through. With an ulcer of this size in the diaphagm communicating with the liver and the lungs both, the prognosis could not be other than very unfavourable. No hope of recovery could be entertained under such circumstances. The only circumstance, he thought, that could make such cases at all hopeful, would be when there is an external opening in addition to that in the lungs, as occurred in a case at St. Bartholomew's under Dr. Hue's care. In this case relief was afforded by the formation of an external opening, and he (Dr. T.) believed that the man ultimately recovered. With reference to Mr. Cooper's case of hydatid following an injury, he (Dr. T.) mentioned several instances in which the existence of hydatid was preceded by a similar origin, occurring at different periods of time prior to the discovery of the evil, and he attributed it to the injury lessening the vitality of the part. Dr. Thompson then spoke of diet as a cause of hydatids, and said he considered too much vegetable food had a great influence; in corroboration of this he gave two cases of hydatids occurring in greengrocers.

Dr. Pettigrew briefly described the case of a lad, from whose back he had recently cut out a hydatid, the appearance of which had been preceded by a violent blow on the part.

Dr. Peacock said the man, whose case was last reported in his paper, was apparently going on well, but he occasionally suffered from griping pains, so that he feared hydatids were still existing within the abdomen. Dr. Quain had mentioned to him the case of a woman at the hospital for consumption, who, having undergone great privations, expectorated hydatids. In Dr. Quain's opinion, the animals in this case were contained in the lungs, and not in the liver. In reply to Dr. Williams' question, Dr. Peacock said, he had not particularly examined the material lining the cyst in the first case he narrated; but he had in other instances, and found it contained large quantities of the carbonate and phosphate of lime. He did not think hydatids were ever developed in the biliary ducts. It is believed, that when suppuration takes place in hydatids of the liver, it is owing to the entrance of bile into the cyst, by which the animal is killed, and great irritation set up. Such is Cruveilhier's opinion at least. Ulceration takes place between the cyst and some one of the ducts; bile penetrates into the cyst, destroys the animal, and lights up inflammation, causing suppuration, and all the dangerous symptoms which usually follow that condition, and which the animal, while still living, does not induce.

Dr. Addison had seen many cases of hydatids expectorated from the lungs. In one instance of hydatid of the liver, the tumour was punctured by Mr. Hilton, and the patient recovered. In another case the same operation was performed, but was unsuccessful. The tumour was very large, and the patient ultimately sunk. He then mentioned a case of abscess of the liver, and said its occurrence was diagnosed, and its gradual approach to and discharging itself by the lung, was clearly indicated by the symptoms. The man complained of pain in the lower part of the right side of the chest, which was unattended by any other sign of pleurisy. Negative evidence, therefore, showed that the great seat of mischief was in the liver. By-and-bye, cough came on, and then all the signs of inflammation of the lung, followed by expectoration of pus tinged yellow, and mixed with bile. The *post-mortem* examination showed an abscess of the liver, with malignant ulceration of the duodenum, the latter being regarded as the cause of the inflammation and suppuration which had occurred in the liver. The pus had caused ulceration through the diaphragm and the pleuræ into the lung, whence it had been discharged.

A CASE OF GUNSHOT WOUND,
AND SUBSEQUENT EXTRACTION OF A BULLET FROM THE BLADDER.

By E. M. MACPHERSON, Esq., Assistant-Surgeon in the 9th Royal Lancers.
(Communicated by JAMES DIXON, Esq., Assistant-Surgeon to St. Thomas' Hospital.)

A private in H. M. 24th Regiment was wounded at the battle of Chillianwallah, on the 13th of January, 1849, in the left buttock. Severe pain was immediately felt in the testicle on the same side. The ball could not be found, but the wound healed without difficulty. No blood was ever noticed in the urine. Symptoms of disturbance of the bladder shortly afterwards set in, which not yielding to remedies, the bladder was examined, and a foreign body detected; and on the 30th of August the lateral operation, as if for the removal of a calculus, was performed. An iron ball was extracted, which had become encrusted with a thin layer of sandy deposit. To the above case Mr. Dixon added notices, from various writers, of fifteen operations for the extraction of balls, which had either primarily entered the bladder, or, having lodged in the immediate neighbourhood, had made their way into its cavity. Mr. Dixon had been favoured, by Mr. Cusack, of Dublin, with a notice of a similar operation performed by him, and another by the late Mr. Colles, neither of which has been published; in three cases extraction was not attempted, or was unsuccessfully tried, the bullets, forming nuclei of stones, having been found in the bladder after death; in one case the bullet was small enough to be voided by the urethra. The situation of the external wound, in the cases cited, was very various. The time that elapsed between the infliction of the wound and the removal of the ball varied from a day or two to ten years. The lateral operation was performed in the majority of cases; but the high operation was employed by Baudens, on account of the ball having entered at the bottom of the linea alba; so that, by enlarging the recent wound, he could reach the cavity of the bladder.

Mr. de Morgan said, that when he was a student, he had been present at an operation by Sir Charles Bell, on a gentleman from Ireland, who had been shot in the hip, and who, after a time, presented all the symptoms of a foreign body in the bladder. This could be most distinctly felt by the instrument prior to the operation; but when the bladder had been cut into, it had disappeared. It was afterwards removed by Mr. Cusack or Mr. Colles. It was supposed, at the time, that it had made its way into the bladder by ulceration, and that, during the operation, it had slipped back into the ulcerated cavity.

The Secretary read an extract from the paper, stating, that in the case operated on by Mr. Cusack, an operation had been previously performed unsuccessfully.

Dr. Pettigrew had recently seen the gentleman referred to by Mr. de Morgan, and he was then in the enjoyment of good health.

WESTMINSTER MEDICAL SOCIETY.
March 16, 1850.

Dr. Murphy, President, in the Chair.

WORMS IN THE NOSE—SUSPECTED IMPOSITION.

Mr. Willing, of Hampstead, described the case of a child, twelve years of age, on whom he had been in attendance for worms, some of which had been ejected from the mouth. He was informed by the mother that some had been withdrawn from the nose, by passing up pieces of bread, which came back covered with them. Mr. Willing exhibited in a bottle a worm which he had been told had been discharged through the nose. This was examined by the members of the Society, and ascertained to be a common earth-worm.

Dr. Lankester, Dr. Routh, the President, Dr. Sibson, and others, considered the case to be one of imposture, and several instances of a similar character, were narrated. Mr. Willing, however, assured the Society, that the parents of the child were very reputable people, and would not countenance any deception. He promised to obtain further particulars.

FRACTURE OF THE UPPER PART OF THE OS FEMORIS.

The Secretary then read a letter from Dr. Coley, physician to the British Legation at Brussells, on the treatment of fracture in the upper part of the os femoris.

Dr. Coley observed, that fracture of that part of the thigh-bone having been generally followed by disunion or an angular union, and remarkable shortening of the extremity, the late Sir Astley Cooper introduced a new mode of treatment, by placing the fractured limb on a double inclined plane. This practice, though founded on sound physiological principles, and probably successful in the hands of that distinguished surgeon, has not been equally successful in the practice of others. Patients thus treated are met with in whom the injury has been followed by as great a deformity and shortening of the limb, as under the old plan of treatment. The mode of treating them recommended by Dr. Coley, is that introduced by Baron Larrey, which, he says, is uniformly successful in these cases, and is peculiarly adapted to all the varieties of oblique fracture to which the os femoris is liable, as well as to those which occur in the upper portion of the bone. The patient being placed on his back in bed, an uninterrupted extension of the fractured limb is continued, until the muscles are completely exhausted, and the limb is brought to the same length as the sound one. This is effected by a pulley and a sufficient weight applied in connexion with the fractured limb at the foot of the bed, and usually occupies about forty-eight hours. The broken ends of the bone being thus brought into perfect apposition, the muscles no longer presenting any resistance, and the natural length of the limb being restored, a long roller is applied round the foot and ankle, and carried up to the top of the thigh, moistened pasteboard splints being introduced beneath, and confined by the bandage in all directions, so as, with the assistance of paste, to render the leg and thigh immoveable in its extended position. The paste is made with starch, and is applied to the under surface of every circumvolution of the roller, so that, after the pasteboard and the bandage become dry, the leg and thigh are perfectly immoveable. The pulley is then removed, and no examination made for four or five days, when the roller is divided in various parts, with a pair of strong scissors, to allow an inspection, and relieve any tumefaction that may have occurred; after which, an additional roller is applied, secured with paste as before. By this plan, Dr. Coley states, deformity and shortening of the limb may be prevented.

Dr. Semple then read a paper under the following title:—

CLINICAL ILLUSTRATIONS OF DISEASES OF THE NERVOUS SYSTEM, AND OF OTHER AFFECTIONS SIMULATING THEM DURING LIFE.

He commenced by alluding to the difficulty which attended the pathology, the diagnosis, and the treatment of cerebral diseases; and he admitted that the cases he was about to relate tended rather to increase than diminish the obscurity which hung over those affections. But he thought, that the study of Medicine was best advanced by the collection of well-reported cases by numerous inquirers, and he offered the present contributions to the Society in furtherance of that object. He by no means wished it to be understood, that the present paper was intended to embrace a general consideration of the diseases of the nervous system, but was merely to be regarded as an introductory chapter to that extensive subject, and was intended to point out some of the difficulties which

attend the investigation of these affections. The remarks about to be offered were altogether practical, and were derived from cases which had fallen under his own notice. The first case related was one in which a man who had no previous symptoms whatever, died suddenly, and on a *post-mortem* examination it was found that a large adventitious membrane existed upon the surface of the left hemisphere, and completely concealed that part of the brain, which was compressed by the morbid growth. The second case was that of a girl who had recovered from peritonitis, and who afterwards was seized with violent pain in the abdomen, relieved upon pressure, together with incessant vomiting. All medical treatment was quite unavailing; opiates, calomel, croton oil, hydrocyanic acid, were all tried and uniformly rejected from the stomach; and she died in two days from the date of the attack. On a *post-mortem* examination, no marks of disease were found in the abdomen, except that the right ovary was full of pus, contained in a distinct sac, lined by a smooth membrane. The arachnoid membrane was minutely injected, and there was a large quantity of serous fluid poured out upon the surface of the brain and in the ventricles. The author stated, that, although this was a case of great obscurity, he considered that death was due to an attack of meningitis, for he could not satisfy himself, that the suppuration of the ovary, which was evidently of long standing, and was wholly unconnected with any other morbid appearance in the abdomen, could induce such a rapidly fatal result. The third case was one of an old woman who was seized with many of the symptoms of cerebral disease, such as pain in the head, dilatation of the pupils, spasmodic rigidity of the muscles, terminating in insensibility and death. The *post-mortem* examination showed that the brain and the membranes were perfectly healthy in structure, but there was granular degeneration of the kidney, with albuminous urine. The next case was one of epilepsy, which was treated for several years without any marked benefit; and after death it was discovered that there was extensive thickening of the cranial bones, and corresponding depressions upon the brain. The fifth case was an interesting instance of an extensive collection of hydatids beneath the arachnoid membrane and in the ventricles; some of the hydatids, which belonged to the variety *cysticercus cellulosæ*, were exhibited to the Society. The symptoms during life were, a bloated, anasarcous condition of the body, and coma, accompanied by stertorous respiration, feeble pulse, and cold extremities. The next case was one of local congestion of the brain, affecting the origin of the fifth pair of nerves on the right side. The symptoms were, violent pain in the right eye, and in the parts supplied by the ophthalmic and superior maxillary nerves; spasmodic closure of the eyelid; irregular shape of the pupil, which was sometimes triangular and sometimes oval. These symptoms were followed by others more severe, as tetanic closure of the jaws, long-continued rigidity of the muscles of the extremities, suppression of urine, laborious respiration, insensibility verging upon coma; but the case terminated in complete recovery. The treatment consisted in venesection, blistering, the application of solution of belladonna to the termination of the nerves, the free exhibition of mercurials, and purging. The favourable crisis was marked by the diminution of pain, the restoration of consciousness, the evacuation of fæces, the copious flow of urine, and the appearance of salivation. The author then briefly adverted to a case lately attended by himself and by Dr. Cormack, in which they found a tuberculous tumour in the right thalamus opticus, and, on examination of this tumour by the microscope, it was found to present the same appearances as those seen in some tuberculous matter taken from the mesenteric glands of the same subject. The patient was a child of a strumous habit, who died of hydrocephalus. The author concluded by offering some observations upon the whole subject of cerebral disease, insisting upon the facts, that pathology was the only true basis of classification, and that our views upon this class of affections could not be entitled to credit, unless they were supported by *post-mortem* investigations in all fatal cases; and that the improvements in this department of medical science must depend upon an accurate comparison of the appearances detected by the scalpel with the symptoms and the results of treatment during life. As to the treatment, it was too various to allow him to enter upon it on the present occasion; but he deprecated the indiscriminate use of the lancet in all cases of cerebral disease, even when attended by symptoms of compression; and he believed that the state of the pulse was the best guide to our conduct in this particular. He believed that bloodletting, when judiciously employed, was eminently serviceable in this class of cases; but that, when improperly resorted to, it accelerated, if it did not cause, the death of the patient.

Dr. Sibson inquired the state of pulse that would warrant bleeding in Dr. Semple's opinion.

Dr. Semple, in reply, stated, a certain amount of fulness and rapidity. When the pulse is feeble and compressed, it would be dangerous to bleed.

Mr. Hunt had long despaired of any accurate diagnosis being made in diseases of the brain. He had been in the habit of examining such cases after death, whenever he could get the opportunity, and had rarely found the appearances such as he had been led to anticipate from the symptoms. He had, therefore, in all such cases, given his opinion very cautiously. We are not yet able, from the symptoms, to ascertain whether the disease is functional or structural; that is, whether the disease depends on altered structure of the brain, or is caused by sympathy with other organs. He (Mr. Hunt) did not agree with the author, that when, with cerebral symptoms, we have a soft, compressed pulse, we should not bleed. In such cases, he (Mr. Hunt) has opened a vein, and has found, after the loss of three or four ounces of blood, the pulse rise and become full, and the patient improve, as the blood continued to flow. The obscurity of the symptoms in cerebral disease is very great, and the diagnosis, prognosis, and treatment should be in accordance. He was glad to find that Dr. Semple purposed to pursue the inquiry, as no very satisfactory information is to be derived from books.

Dr. Richard Chambers drew the attention of the Society to a symptom of cerebral disease, which he had repeatedly noticed; namely, the eversion of the tongue from the mesian line. Its presence always marks cerebral disease; it does not occur in sympathetic maladies. He had seen cases in which this symptom alone was present; from it he had diagnosed the existence of cerebral disease, and the result of the case had proved he was right.

Dr. Sibson said, that the first of the valuable series of cases brought forward by Dr. Semple, in which a layer of fluid was present between the thickened coats of the arachnoid,—cerebral symptoms being absent,—there was not any active existing disease within the cranium; and the morbid changes in the arachnoid were the remains of a disease which had existed at some more or less remote period. Those remains, spread over the surface of the brain, were not in their nature such as to derange the functions of the organ. In many cases where extensive collections of fluid—even pus of slow formation—existed over or within the hemispheres, there were but few indications of the disease; the effects being very different when the disease was active, or the extravasation rapid and increasing.

This subject was illustrated by the following analysis made by him, from Dr. Abercrombie's work, to show the proportion of cases of cerebral affections in which convulsions were present. This analysis shows the predominating symptoms in certain conditions of spinal disease:—

—	Muscular Rigidity.	Tetanic Convulsions also.	Ordinary Convulsions.	Epileptic Convulsions.	Paralysis without Convulsions.	Neither Paralysis nor Convulsions.
In 8 Cases of Spinal Meningitis	6	(5)	1	0	0	1
In 4 Cases of Inflammatory Vascularity of the Chord	0	...	2	1	1	0
In 19 Cases of Ramollissement of the Chord	5	3	5	0	9	0
In 21 Cases of Chronic Disease of the Chord, Tubercle, &c.	3	...	11	3	4	0

This shows, that in meningitis of the chord, and some cases of inflammation, the spinal functions are exalted as they are in tetanus, and that muscular rigidity and tetanic spasms may result. If the inflammation or disease of the spinal marrow be injurious or destructive to the spinal functions, then convulsions, or convulsions accompanied or followed by paralysis, or simple paralysis result. In the latter cases, the control of the brain over the spinal nerves below the seat of disease is withdrawn.

The subject was further illustrated by the following analysis made by Dr. Sibson, of the cases contained in Dr. Abercrombie's work on diseases of the brain, showing the proportion in which convulsions were present in cerebral disease:—

Of 33 cases in which the surface of the brain was affected by means of cranial disease, inflammation of the dura or pia-mater, 23 had convulsions, 10 had none.

Of 31 cases in which the brain was acutely inflamed, 25 had convulsions, 6 had none.

Of 19 cases of acute hydrocephalus (10 of these recovered, their nature uncertain,) 10 had convulsions, 9 had none.

Of 17 cases of simple effusion into the ventricles (11 of these recovered,) 5 had convulsions, 7 had none.

Of 12 cases of tuberculous disease of the brain, 3 had convulsions, 7 had none.

Of 10 cases of apoplexy, without extravasation of blood, 3 had convulsions, 7 had none.

Of 23 cases of apoplexy, with extravasation of blood, 7 had convulsions, 16 had none.

From this analysis, we learn that convulsions are more frequent when disease attacks the parts superficial to the brain, and when the substance of the brain is acutely inflamed, than it is when by extravasation of blood or effusion of serum, the mass of the brain is subjected to pressure; and that they are much more frequent in the acute than the chronic states of the disease.

In the second case, in which incessant vomiting was the only symptom of cerebral disease, and in which the membranes were red, with increased vascular congestion, it may be questioned whether inflammation of the membranes existed, since none of the products of inflammation were observed, the presence of which constitutes the only unequivocal sign of inflammation. Of the cases of cerebral disease related by Dr. Abercrombie, amounting to nearly 200, it is stated that 33 had vomiting.

The case of albuminuria, related by Dr. Semple, in which head symptoms were present, although there was no disease of the brain, presents an interesting feature in the occurrence of muscular rigidity. A valuable test is afforded by this case, to distinguish between rigidity caused by spinal disease, and that by albuminuria; since while the rigidity is constant in one set of limbs in spinal disease, in the case in question the rigidity affected first one limb and then another.

Of 20 cases related by Dr. Abercrombie, in which there was muscular rigidity, there was spinal disease in 18, and cerebral disease in 2.

The following additional analysis, made from the cases narrated by Dr. Abercrombie, shows, at one view, the proportion in which certain symptoms are present, in cases of cerebral and spinal disease:—

Of 34 cases in which vomiting existed, 33 had cerebral disease, 1 had spinal disease.

Of 105 cases in which convulsions existed, 90 had cerebral disease, 15 had spinal disease.

Of 20 cases in which muscular rigidity existed, 2 had cerebral disease, 18 had spinal disease.

Of 55 cases in which coma without convulsions existed, 54 had cerebral disease, 1 had spinal disease.

Of 15 cases in which paralysis without coma or convulsions existed, 9 had cerebral disease, 6 had spinal disease.

Of 9 cases in which neither paralysis, coma, nor convulsions existed, all had cerebral disease.

Of 14 cases in which epilepsy existed, 9 had cerebral disease, 5 had spinal disease.

Dr. Webster remarked, that the eversion of the tongue, mentioned by Dr. R. Chambers, was not the sole indication we had of incipient cerebral disease. The sound of the voice was diagnostic; it was decidedly peculiar in affections of the brain. Once heard, it could never be forgotten. He thought the treatment Dr. Semple had pursued, in the second case, was too active. He (Dr. Webster) should not have used such powerful remedies. Medical men were but too apt to have recourse to strong medication in diseases of the brain. In all such cases, it is, however, imperative to act on the kidneys, organs which sympathize much with the brain.

Dr. Daniell said, there was a diagnostic symptom between functional disorder and structural disease of

the brain. In the vomiting attending the latter disease, bile was freely thrown out, but, in the former, it was not bile, but a morbid secretion of the stomach of a dark colour.

Dr. Snow referred to vomiting as a symptom of cerebral disease, and said, it was often the first that fell under notice. He had been able to check the progress of inflammation of the brain in young children, by previously diagnosing its approach by that symptom, and treating it accordingly.

Mr. Wing greatly valued the author's observations in reference to renal disorder and disease simulating affections of the brain. He would beg to add one circumstance which had that evening been unnoticed, that of retention of urine as being one cause of a comatose state. He had met with three cases; two from a renal affection, and a third from stricture. In such instances, and in those of retention of urine, he had found decided relief from the application of a warm bran poultice, which, having been put into a pillow-case, and placed under the patient, not only came in contact with the loins, but extended also along the whole course of the spinal column, and produced a good effect by determining largely to the skin, and by equalizing the circulation, thus relieving inflammatory, congestive, or irritative action, without any material exhaustion of constitutional power. Mr. Wing had remarked, with Dr. Semple, in *post mortem* cases, the existence of serous cysts in the choroid plexus in cases of insanity; and in one, only one, of melancholia, he had found an hydatid. He had been struck with the appearance of disease in the plexus choroides in different *post mortem* cases of the insane; in affections of the brain, whether accompanied or not by any mental disorder. He had on several occasions obtained great benefit from opening the jugular vein, in congestive and oppressed states of the cerebral circulation, and where it was expedient to be sparing of the loss of blood. He had attended a patient who was by no means of a strong constitution, and who had had three attacks, attended with convulsions, from an overloaded stomach, and from which he was restored in a few days, each time by taking away about ʒiv. of blood from the jugular vein, and by giving freely calomel and jalap. On a subsequent occasion, and from the same cause, in Mr. Wing's absence, a medical gentleman, regarding the case as most serious, took away full two pints of blood, and when Mr. Wing saw him, he found the patient labouring under numbness of the left foot and hand. He was near three months before he recovered.

A special meeting of the Society was held on the 28th ult., when, after considerable discussion, resolutions were passed authorizing the Council to take measures for the amalgamation of the Society with the Medical Society of London.

CORRESPONDENCE.

HOMŒOPATHIC STATISTICS.

[To the Editor of the Medical Times.]

SIR,—The repudiation of homœopathy, on the part of the London University, by one of its members, is to me a sufficient recompense for any little trouble I took in the arrangement of those homœopathic returns which appeared in a former number of your Journal.

The "provincial homœopathic graduate," referred to in those returns, is correctly believed, by your Correspondent, to be "the same individual who, in a preceding paragraph, appears to be an extra-Licentiate of the London College of Physicians.

Having taken it for granted, that the "homœopathic list," as given by the homœopaths themselves, was a correct list, I placed this extra-Licentiate amongst the M.D.s practising homœopathy in the provinces.

If I erred in so doing, I, at your Correspondent's suggestion, beg to refer to the specification in question, as recorded in the "homœopathic list." It is inserted thus—

"Torquay—Charles Hills McIntosh, M.D., Higher-terrace."

Although *here* no reference is made, either to the College whence the degree of M.D. was obtained, or to the extra license of the London College of Physicians, I found that, in the *Provincial Medical Directory*, the extra-license was noted, whilst the affixation of M.D. to the name was omitted; and thus I was induced to enter this M.D. as one of London's own.

Having now sufficiently explained, permit me, relative to this point, to ask, whether the College of Physicians of London grants its extra-license to others than such as are in previous possession of the degree of M.D.?—and, if so, whether the simple possession of the College's extra-license entitles to the assumption of the graduate's distinction of M.D.?

A brief answer will oblige,

Sir, yours most truly,

April 2, 1850. JAMES INGLIS, M.D.

[We regret to acknowledge, that the London College of Physicians *does* grant its license to others than such as possess the degree of M.D.; and, moreover, if it does not directly sanction, it certainly allows those in possession of its simple license, to style themselves Doctor. To this rank they have no more right than have the Licentiates of the Apothecaries' Company, the Members of the College of Surgeons, or the Licentiates of the Pharmaceutical Society. The College of Physicians may create Physicians—*Medici*; Universities alone can make Doctors—*Doctores*.—See our Number for June 2, 1849.—ED. *Med. Times*.]

PRESERVATION OF VACCINE LYMPH.

[To the Editor of the Medical Times.]

SIR,—It would seem to be needful to add a few words to what I have already written on the preservation of vaccine lymph. I suppose that all are agreed as to the desirableness of having at hand, ready for use, a stock of fluid lymph, when, as so often happens, it is difficult or impossible to obtain it direct from a living source. My own mind was some time ago so strongly impressed with a sense of its importance, that I was led to seek earnestly for some means of attaining so useful a result.

What was wanted for the purpose in view was some liquid *natural* to the animal body; having the property of remaining liquid at common temperatures; neither crystallizable, nor disposed to ferment; antiseptic in a marked degree; and, lastly, having the power of easily mixing with the lymph to be preserved. To fulfil these indications, no agent appeared so well adapted as glycerine, the properties of which, in its various therapeutic applications, have been so accurately described by Mr. Startin. Accordingly, I mixed glycerine with vaccine lymph, in the way detailed in the last number of the *Medical Times*, with the satisfactory result—better than any theory—of discovering that, in addition to its known property of preventing fermentation and mouldiness in vegetable substances, it had also that of keeping vaccine lymph, an animal product, undecomposed, in a fluid state, for months. The proof of this statement simply consists in the fact, that lymph, thus preserved, has, in my present experience, never failed to produce, at least, all the effects of perfectly fresh lymph. I have no proof, and never said that I had, that it would succeed in those subjects who resist the influence of *fresh* lymph;—though I think the conclusion is irresistible, that no change like that of putrefaction could have taken place in the preserved lymph, if its effects were *identical* with those of recent lymph. But, in the case of *dry* lymph, it is reasonable to conclude, that it *is* greatly altered in its constitution, in the transition from a liquid to a solid state; and that its effects must be more or less impaired, if it remain in that condition for a long period.

The question, as to the value of any supposed fact, is only to be elucidated by a calm and candid inquiry —*never* by surmisings, which, even if true, would equally need proof before they could be received in evidence. I would ask, then, each one for himself, to test the power of glycerine to preserve lymph. Observations carefully and honestly made would, after a time, be conclusive in deciding the matter either in the negative or affirmative. In the meantime, as controversy is entirely foreign to my taste, I must decline entering into it with any of your Correspondents upon this subject.

I am, Sir, your faithful servant,

R. R. CHEYNE:

43, Berners-street, March 30, 1850.

ERRATUM.

[To the Editor of the Medical Times.]

SIR,—In your report of the Westminster Medical Society's proceedings, under date the 2nd inst., your reporter makes me state that in cases of *delirium tremens* I had seen an ounce of opium given with the effect of producing coma and sanguineous apoplexy. Will you do me the favour of correcting this statement to "*an ounce of tincture of opium*," as mentioned in my statement of facts.

I am, Sir, faithfully, JAMES BIRD.

27, Hyde-park Square, March 28, 1850.

THE TEMPERANCE PRIZE.

[To the Editor of the Medical Times.]

SIR,—I beg to submit the following to you, both for publication and comment, if you think well; presuming that my Essay has been selected by the adjudicators as next in merit to Dr. Carpenter's, which obtained the prize, and has also been recommended by them for publication. Early in the year 1848, advertisements appeared, signed by Messrs. Gilpin and Beggs, as agents for the donor, offering "a Prize of One Hundred Guineas for the best Essay on the use of Alcoholic Liquors in Health and Disease;" the competing Essays to be sent in, on or before the 31st day of December, 1848. In due time my Essay was forwarded. On the 1st day of January, 1849, advertisements were again issued, stating that it was considered that sufficient publicity had not been given to the offer, that the period for receiving Essays was postponed till October 1st, 1849, and that competitors who had sent in MSS. might have them back. My Essay was returned to me, having been opened. It was again sent in at the second appointed time. The following note was the result:—

(Copy.)

"11, Poultry, Dec. 13, 1849.

"SIR,—The One Hundred Guinea Prize has just been awarded to Dr. Carpenter. The adjudicators have also recommended the Essay bearing the motto —'*Quot homines tot sententiæ*'—on account of its great merit. The donor has requested me to communicate with the author, to ask whether he will consent to its publication. The donor wishes, if it be agreeable to you, to have the privilege of reading it, on which he will determine upon an offer to assist in the publication. We were obliged to break the seal, in order to communicate with you. A line at your earliest convenience will oblige,

"Sir, Yours truly,

"THOMAS BEGGS.

"Dr. Spenser Thomson."

Of course I immediately wrote, consenting to the proposal, and thanking the donor for his liberal intentions. After a delay of two months I received the following:—

(Copy.)

"London, Feb. 12, 1850.

"I have this day received from the donor of the one hundred guinea prize your MS. Essay. He desires me to acknowledge your great kindness in allowing him the perusal. He is, however, of opinion, that the cause he is anxious to promote will not be served by the publication of more than one Essay. There is much valuable matter in your Essay.

"I am, Sir, yours very respectfully,

"THOMAS BEGGS."

Feeling somewhat surprised at this unexpected change in tone, I wrote to Mr. Beggs, requesting an explanation. In answer, I received a courteous letter, expressive of regret that "expectations had been created," which had "not been realised," but stating, in reply to a request of mine, "there could be no possible objection to state, in the prize volume, that your Essay had been considered second in merit. In fact, the terms of the adjudication, adding your name, will, I have no doubt, be quite satisfactory to you." With this I expressed myself satisfied. At my request, the terms of adjudication were transmitted to me. They were as follow:—

(Copy.)

"From the fifteen MS. Essays, on the Use and Abuse of Alcoholic Liquors, transmitted to us by Messrs. Beggs and Gilpin for adjudication, we have unanimously selected, as the best, the one bearing the motto, '*Mens sana in corpore sano*.' We accordingly adjudicate to its author Mr. Eaton's prize of one hundred guineas.

"We also think it due to the author of the Essay, bearing the motto '*Quot homines tot sententiæ*,' to record our opinion of its great merits, and to express our belief, that the cause of temperance would be benefited by its publication. We further deem it right to speak in terms of commendation of the Essay

bearing five mottos, the first of which is, 'How use doth breed a habit in a man.'

(Signed) "JOHN FORBES, M.D.
THOS. ROUPELL, M.D.
WILLIAM A. GUY, M.B."

The Prize Essay has now appeared. The terms of adjudication are given without mention of any name whatever; and, further, the words, "and to express our belief, that the cause of temperance would be benefited by its publication," which are applied to my Essay, are entirely omitted.

I have only to remark, that the *unusual* postponement in the first instance, must either have been superfluous as regards Dr. Carpenter, or unjust towards myself; that, under the circumstances, to detain a manuscript of little more than 300 pages, for two months, during which time the prize volume must have been going through the Press, was, to say the least, inconsiderate; that my sealed envelope was opened in direct contravention of the conditions of competition, for what purpose I am unable to make out, if not even a name was to be mentioned; that the omission of that portion of the adjudication recommending the publication of my Essay, was unjust.

I remain, Sir, yours obediently,
SPENSER THOMSON, M.D., F.R.C.S.E.
Haunton, Burton-on-Trent,
March 27, 1850.

UNIVERSITY COLLEGE.

[To the Editor of the Medical Times.]

SIR,—As a student of University College, I read with great pleasure your admirable strictures on the mean, interested, and vulgar attacks of the *Lancet* on University College and all connected with it. I do not profess to enter into the causes of this virtuous indignation. Every one knows how unscrupulously the *Lancet* bespatters its enemies in language peculiar to its own bureau, and in idiom adhering striotly to the rules observed at Billingsgate. One week we see in its pages an attack on some inimical institution; another week is displayed in its columns a fierce tirade on some refractory individual, abounding in vulgar ribaldry and offensive inuendo. Again it appears mild as a lamb, or, rather, unctuous as a serpent, with an apotheosis of some temporary adherent, or a friendly and forgiving notice of some ancient enemy. Lo! the gentle Guthrie is raised to the third heavens, and even the *ci-devant* "renegade Lawrence" is found to possess some redeeming qualities.

Parental affection may be allowed to influence the judgment and dim the vision of even the wisest; but how often, alas! does it, instead of remaining in its beauty as a heaven-implanted virtue, degenerate into the worst of vices, and leave its possessor in a position at once pitiable and contemptible.

What is the "miasma" that your contemporary views but the illusion of a misguided and bewildered mind; what the "hideous monster" that his exuberant and morbid fancy paints, but "the green-eyed monster, jealousy?"

I beg to assure you that the students of University College regard these attacks with merited contempt, and that, at a meeting held a few weeks back, for the redress of certain grievances at the College, it was distinctly stated that the movement had no connexion with the statements in the *Lancet*, which, whenever they have been tangible, have been uniformly incorrect. Even lately, when the students resented the rustication of two of their number, the *Lancet* stepped in and strove (but in vain) to throw the firebrand—discord, between them and their much-respected teachers.

The Institution, as you are well aware, is not yet quite annihilated by the thunderbolts of the Lilliputian Jupiter, and its corps of excellent teachers has not, as your imaginative cotemporary would make the world believe, vanished "*tenues in auras.*" Even surgery maintains its existence, though glycerine has not yet taken root beneath the shade of our Upas tree.

Yours most respectfully,
University College. A STUDENT.

MR. SKEY AND THE GENERAL PRACTITIONERS.

[To the Editor of the Medical Times.]

Would it not be wiser if the General Practitioners, of whom I am one, instead of crying out that they are insulted and degraded, by not being admitted at once to all the honours which the corporate bodies are able to confer, were to lay their very intelligent heads together, and devise some plan by which to remove, as far as possible, all circumstances which lower them in the eyes of the public and of their brethren, and thus to avoid all causes of real degradation.

I did not attend the Hunterian Oration. I heard afterwards, that the Orator had insulted that class of the Profession to which I belong, and that a gentleman, who always seems to me to be the Charles Cochrane of the medical malcontents,—an amiable man, with more brains than business, had seized the favourable occasion of a ready-made audience to distinguish himself by a short speech.

When I read the Oration, therefore, I was rather surprised to find so very little to complain of. Indeed, my own griefs, and those of my class, are rather pathetically deplored.

I have long felt exceedingly amphibious. Indeed, I am sorry to say, more like a flying fish than any less fidgety animal of the class; for, between the Physician and the Druggist, I should lead a very anxious life, if I were not a man of small family and small expenses, as well as small means and small practice.

I hope the orator for 1851 will be able to point out some remedies for the present evils; and, with the humble desire to assist him in this duty—for duty it will by that time have become—I will give you a few facts, perhaps more known than considered.

I once witnessed the turning out of the books of a large West-end firm, "doing," as the publicans say, many gallons a week of most approved physic. I could not help lamenting, that the only records contained in this immense "library of practical medicine," were, who had swallowed, what, and how much had been paid for it.

What a record of symptoms there *might* have been here. What might not Mr. Farr have made of such materials, with such a staff as must have been engaged in its collection.

The practical inference is, I think, that the General Practitioner should increase by all possible means the amount and value of his contributions to science, by recording and making available to others what he meets with in the practice of his art. He would thus take his true place as a volunteer in the ranks of medicine. What might not be accomplished by such a corps well officered. Well officered they would be, most undoubtedly; for in England, somehow or other, the best men turn up when wanted. Neither English buccaneers, nor English grenadiers, have often failed for want of leaders, any more than for want of pluck. But the choice is open to us, whether we will be adventurers, seeking our own gain in our own way, and cutting each other's throats, when other work is scarce, or when the booty seems ill-shared; or, whether we shall be a disciplined body, commanding respect in peace and admiration in war.

Your obedient servant,
JACOB.

MEDICAL REFORM.—At a meeting of the Associated Physicians and Surgeons of Shropshire and North Wales, held in Shrewsbury, this 19th of March, 1850, Dr. H. G. Johnson, President, the following resolutions were unanimously agreed to:—1. "That a copy of the Memorial, recently addressed to the Royal College of Surgeons by this Association be forwarded to the Lord Advocate, and, that His Lordship's attention and consideration be solicited to the same." 2. "That a Memorial be addressed to Her Majesty's Secretary of State for the Home Department, requesting, that in any new Charter, to be granted to the Royal College of Surgeons, provision be made for a more liberal extension of the franchise, and the admission of Surgeons in general practice to the governing body of the College of Surgeons; and that such a re-organisation of the Colleges of Physicians and Surgeons be effected, as will insure a uniform and efficient education to all, and prevent the evil of a new Incorporation." 3. "That a Deputation, consisting of J. G. Arrowsmith, Esq., F.R.C.S.E., Shrewsbury; W. J. Clement, Esq., F.R.S.C.E., Shrewsbury; P. Cartwright, Esq., M.R.C.S.E., Oswestry; W. P. Brookes, Esq., M.R.C.S.E., Much Wenlock, be appointed to present the Memorial to Sir George Grey, Bart., and to accompany the Deputations appointed from Manchester and other places." 4. "That the Members of Parliament for the borough of Shrewsbury, E. H. Baldock, Esq., M.P.; R. A. Slaney, Esq., M.P., be invited to form part of the Deputation, and to assist with their advice and influence." 5. "That these resolutions be published in the Medical Journals."—P. CARTWRIGHT, Hon. Secretary.

HEALTH OF LONDON DURING THE WEEK ENDING MARCH 30.

In the week ending last Saturday, 1167 deaths were registered in the Metropolis. In the ten corresponding weeks, namely, the thirteenth in each of the years 1840-49, the average number of deaths was 1054, or corrected for increase of population, was 1150; there is, therefore, an apparent excess of mortality in last week above the average, but it amounts only to 17. The weekly number of deaths has continuously increased during the last month; the deaths were successively 875, 967, 1026, and 1167. Part of the great increase in last return is due to the augmented mortality of diseases that affect the organs of respiration, for in this class the deaths registered last are 252 (namely, from bronchitis, 113; from pneumonia, 88; from asthma, 29; from laryngitis, pleurisy, and other diseases of the respiratory organs, 22.) This class numbered in the previous week 231, and in both weeks the numbers are much above the average, which is not more than 184. The extraordinary coldness of the weather serves to explain this result. From consumption there were in the previous week 135, in the last 115; in both there were considerably less than the corrected average, which is about 150. In the epidemic class, small-pox and scarlatina are still less fatal than usual, especially the latter; measles, hooping-cough, and typhus, from which there were last week, 19, 44, and 39 respectively, show about the ordinary amount of fatality; 7 persons died of influenza, being an increase; 18 of diarrhœa and dysentery, which is less than in the previous week, but more than the average. This excess is chiefly owing to coroners' cases being kept in reserve till the end of the quarter, amounting to 91, of which only 10 occurred in the week, and 52 "sudden" deaths, of which the causes have not been sufficiently ascertained, or are improperly returned, and of which only 6 occurred in the week. Amongst others, are 5 children suffocated in bed or on the mother's breast, 3 persons who died of intemperance, and a man from exposure to cold.

Deaths certified by written statements of qualified Practitioners	946
Deaths not certified by medical attendants, or not reported as certified	23
Deaths not certified because the deceased had no medical attendance	13
Deaths returned by Coroners	185
Total	1167

It appears that deaths registered in London with the signatures of Coroners, and fatal diseases registered under the authority of medical certificates, are to the whole number in the proportion of nearly 97 per cent.

The deaths in the several hospitals of London occurred as follow:—

GENERAL.			
St. George	...	...	7
Westminster	...	...	1
Charing-cross	...	...	2
Middlesex	...	...	5
University College	...		0
Royal Free Hospital	...		0
King's College	...	...	11
St. Bartholomew	...	...	10
London	...	...	33
Guy's	...	...	9
St. Thomas	...	...	1
FOR CONVICTS.			
Hospital Ship, Unité	...		0
Penitentiary Hospital, Millbank	...	...	0
MILITARY AND NAVAL.			
Royal Hospital, Chelsea (South)	...	...	0
Royal Hospital, Greenwich (East)	...	...	5
Royal Military Asylum			0
Coldstream Guards Hos.			1
Grenadier Guards' Hospital	...	...	0
Scots Fusilier Guards	...		1
Royal Ordnance	...		0
Dreadnought Ship	...		2
LUNATIC.			
Kensington House	...		0
Munster-house (Fulham)			0
Normand-house (Fulham)			0
Otto-house (Fulham)	...		0
Sussex & Brandenburgh-house (Fulham)	...		0
Blacklands-house	...		0
Northumberland-house			0
Whitmore House	...		0
Pembroke House	...		0
St. Luke	...	...	0
Miles'	...	...	0
Warburton's	...	...	0
Lunatic Asylum, Bow	...		0
Bethlem	...	...	0
Lunatic Asylum, Brixton			0
Retreat, Clapham	...		0
York House, Battersea	...		1
New County, Wandsworth			3
Peckham House	...		1
Camberwell House	...		2
LYING-IN.			
Queen Charlotte's	...		0
British	...	...	0
City of London	...	...	2
Hospital, York-road, Waterloo 2nd part	...		0
FOR PARTICULAR CLASSES.			
Female Servant Invalid Asy., Stoke Newington			0
German Hospital	...		0
French Hospital	...		0
Portuguese Jews' Hospital	...	...	1
German Jews' Hospital			0
FOR SPECIAL DISEASES.			
Small Pox	...	...	2
Fever Hospital	...	...	6
Lock	...	...	0
Consumption, Brompton			0
Opthalmic, Charing Cross			1
TOTAL, 107.			

MORTALITY TABLE.

Deaths in the Week ending Saturday, March 30, 1850.

(Metropolis.)

Causes of Death.	Total.	Average of Ten Weeks.
All Causes	1167	1053
Specified Causes	1165	1045
Zymotic (or Epidemic, Endemic, and Contagious) Diseases	182	183
Sporadic Diseases:		
Dropsy, Cancer and other Diseases of uncertain or variable seat	57	60
Tubercular Diseases	165	194
Diseases of the Brain, Spinal Marrow, Nerves, and Senses	127	130
Diseases of the Heart and Blood-vessels	54	31
Diseases of the Lungs, and of the other Organs of Respiration	252	168
Diseases of the Stomach, Liver, and other Organs of Digestion	69	57
Diseases of the Kidneys, &c.	9	8
Childbirth, Diseases of the Uterus, &c.	9	12
Rheumatism, Diseases of the Bones, Joints &c.	9	7
Diseases of the Skin, Cellular Tissue, &c.	1	1
Malformations	0	2
Premature Birth and Debility	22	23
Atrophy	22	15
Age	37	60
Sudden	52	32
Violence, Privation, Cold, and Intemperance	98	56
Causes not Specified	2	8

The following is the number of Deaths occurring from some of the more important special causes:—

Apoplexy	31	Heart	45	Phthisis	115
Bronchitis ...	113	Hooping-cough	44	Pneumonia ...	88
Cholera.....	0	Hydrocephalus	32	Scarlatina	15
Childbirth	6	Influenza	7	Small-pox	8
Convulsions...	37	Liver	8	Stomach	1
Diarrhœa	12	Lungs	15	Teething	13
Dropsy	24	Measles	19	Typhus	39
Erysipelas ...	9	Paralysis	26	Uterus	3

BIRTHS AND DEATHS.

	Births.	Deaths.	Births over Deaths.
Males	711	600	111
Females	720	567	153
Total.....	1431	1167	264

METEOROLOGY OF THE WEEK.

Day.	Barometer.	Thermometer.	Dew Point.	Difference between the Mean Temperature of the day and the same day on an average of 7 years.	General Direction of Wind.		Amount of Horizontal Movement of the Air.	Rain in Inches.	Electricity.*
					A.M.	P.M.	Miles.		
Sunday	29·485	34·4	30·2	— 9·7	N.W.	N.N.W.	90	0·00	Nothing shown.
Monday	29·630	32·9	23·7	— 11·4	N.	N.	65	0·00	Nothing shown.
Tuesday.....	29·650	31·2	18·6	— 13·3	Calm.	Calm.	10	0·00	Nothing shown.
Wednesday.	29·750	35·4	23·4	— 9·2	Calm.	N.E. and Calm.	35	0·00	P. and tension generally strong after noon.
Thursday ...	29·934	34·5	25·1	— 10·3	Calm.	Calm.	80	0·17	P. and tension variable after noon.
Friday	30·005	38·7	27·4	— 6·2	Calm & S.E.	E.S.E.	75	0·00	P. and tension variable.
Saturday ...	29·745	43·9	29·4	— 1·1	E.S.E.	E.S.E.	...	0·00	P. and tension weak generally throughout.
Means ...	29·746	35·9	25·4	— 8·7	N. and E.S.E.		SUM 355	SUM 0·17	

* In this Column, A. stands for Active; N. for Negative; and P. for Positive.

MEDICAL NEWS.

Apothecaries' Hall.—Names of gentlemen who passed their examination in the science and practice of Medicine, and received certificates to practise, on Thursday, the 28th March, 1850:—Harry Frederick Barnett, Feckenham, Worcestershire; Arthur Michael Button, Bury St. Edmunds; John Davies Cleaton, Llanidloes, Montgomeryshire; John Henry Trouncer, Shrewsbury; Hugh Holland Massey, Camberwell; John Martin Birom, Exeter; John Deane Baker, Oakhill, Somersetshire; Joseph Henry Shorthouse, Tunbridge, Kent; William Stolt Steele, Northallerton; Henry Morris Simmonds, Barbadoes; Richard Neale, George E. McLaughlin, John Hutchings Jerrard, Honiton, Devon.

Royal College of Surgeons.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College, at the meeting of the Court of Examiners, on the 22nd instant:— Messrs. John Fourness Brice, Pontefract, Yorkshire; William Michell Clarke, Bodmin, Cornwall; John Thomas Grantham, Crayford, Kent; Thomas Mudge, Bodmin, Cornwall; Robert Rayner, Birstal, near Leeds, Yorkshire; Charles Robbins Maxwell, Brompton, Middlesex; Henry Wilson Sharpin, Bedford; William Vaughan Jones, Romney-terrace, Westminster; William Tindal Robertson, Grantham, Lincolnshire; Alfred Collins, Hon. East India Company's Service, Bengal; and Adam Rogers, Bentinck-street, Manchester-square.

Military Appointments.—26th Foot.—Acting Assistant-Surgeon John Coates, M.D., to be Assistant Surgeon.—Ordnance Medical Department.—Deputy Inspector-General Morgan Thomas to be Inspector-General of Ordnance hospitals; senior Surgeon James Stewart to be Inspector-General of the Ordnance Medical Department; senior Surgeon James Verling, M.D., to be Deputy Inspector-General, vice Thomas, who retires; Assistant-Surgeon John Macintosh, M.D., to be Surgeon; Assistant-Surgeon George Thomas Ferris to be Surgeon; temporary Assistant-Surgeon Arthur Rudge to be Assistant-Surgeon; temporary Assistant-Surgeon Thomas Park to be Assistant-Surgeon.

Naval Appointments.—Assistant-Surgeon John N. Ryder to the Intrepid, screw-steamer, fitting for the Arctic Expedition. Surgeon John G. Williams to be Surgeon-Superintendent to the Maria Somes.

Obituary.—On the 20th ult., at the Westminster Hospital, where he was House-Surgeon, Edward Neville, Esq., M.R.C.S., in the 23rd year of his age, son of W.H. Neville, Esq., of Esher, Surrey, who practised there for many years, and who was on the Queen's establishment at Claremont.—On the 1st inst., Dr. Lauder, F.R.S. Edin., of Sloane-street, Chelsea.—On the 30th ult., Mr. Payne, Surgeon, of Plymouth, drowned in the lamentable wreck of the Royal Adelaide, steamer, off Margate.—On the 14th of March, at Settle, Yorkshire, Thomas Dixon Burrow, Surgeon, aged 53.—On the 6th December, on the coast of Africa, Mr. Roberts, surgeon, R.N., a few days after having been invalided.

The Fellowship.—The first examination for the Fellowship of the Royal College of Surgeons, under the recent regulations, requiring a knowledge of Classics and Mathematics, took place last Tuesday, when only one candidate presented himself. On the following Wednesday and Friday, the number of candidates presenting themselves for the Professional examinations, including the above gentleman, amounted to twelve. The following are correct copies of the questions in Anatomy and Physiology submitted to the senior candidates, viz.:—

1. Describe the structure of the Hip-joint, with the relative situation of the several muscles which surround it.

2. Describe the Duodenum; its course, connexions, and relative position; its blood-vessels and nerves; the pecularities of its structure; its anatomical relation to the liver and pancreas; and that part of the process of digestion to which it is subservient.

3. Describe the Urinary Bladder of the Male; its form, position, connexions, and component tunics; also the Male Urethra; it course, dimensions, lining membrane, the parts surrounding it, and the openings into it.

4. Describe the peculiarities of the Circulation through the Brain; and especially the course and disposition of the principal trunks, venous and arterial.

5. Describe the Diaphragm; its form, disposition, component parts, attachments, openings, and its actions in aid of respiration.

6. Describe the distribution of the Third Cerebral Nerve, and of the first division of the Fifth Cerebral Nerve, and the functions of these nerves.

The following questions on the same subjects were submitted to the junior candidates, viz.:—

1. Describe minutely the structure of the Mucous Membrane lining the stomach and the intestines; its varied disposition, its texture, its constituent vessels, and its peculiar glands in the stomach, and in the several divisions of the intestinal canal.

2. Describe fully the changes which the food undergoes in the stomach and the small intestines; and describe, also, the process of absorption from the small intestines.

3. Describe the constituents of the Blood, namely, the liquor sanguinis and the blood corpuscles, and the changes to which they are subject.

4. Describe the glandular structure of the Kidney, the composition of the Urine, and the purposes of this secretion in the animal economy.

5. Describe the Nerves distributed to the globe of the eye and its appendages, and their functions.

6. Describe the structure of the Cerebellum, and especially the disposition of its grey and white substance, and of the fibrous tracts which connect it with the cerebrum and medulla oblongata.

Answers to any four of the above questions, in each class, would be accepted as sufficient, provided that they were accurate and adequate.

The questions submitted to the candidates yesterday will be published in our next Number.

Scurvy on Board Temperance Vessels.—Dr. Vaughan, who has medical charge of the Naval Hospital at Aden, writes to say, that during the last twelve months, he has had more cases of scurvy from English vessels, than during the previous five years, almost solely from coal-laden vessels, the worst cases coming from vessels sailed on temperance principles. Several ships, he says, have been almost disabled in consequence of both officers and men suffering. He urges, therefore, on charterers and owners of ships, that the men should have an allowance of spirits daily, that the quality of their provisions be strictly attended to, and that cleanliness of clothes and person be enforced. There can be no doubt that this is a most important matter. The serious outbreak of sea-scurvy, which so thoroughly disabled the ships under Lord Anson, and has since been comparatively little heard of, except in vessels proceeding on very long voyages, and badly found in all respects, especially in what are termed "medical comforts,' is a matter worthy of the utmost attention, and would warrant the authorities of the Admiralty in appointing a Medical Commission to investigate its causes, and the means to remedy them. It is evident, from the disease being principally confined to coal-laden vessels, that it springs from some local cause. We are loath to recognise, as that cause, the sailing of the vessels on temperance principles, and we do not agree with Dr. Vaughan in considering that a daily allowance of spirits would act as a preventive. Drunkards are the very worst subjects there can be for scurvy, as they are more readily attacked, and less easily cured, their stamina and powers of resisting disease being already destroyed. At the same time, if the sailors engaged on board were not previously temperate, the being obliged to give up suddenly their habit of drinking, and the great change from intoxication to utter temperance, would, of itself, be sufficient to induce disease, but not the disease called scurvy. There must be other causes; want of cleanliness and bad provisions, want of good and proper ventilation, foul air, and close, damp sleeping places, with insufficient exercise, will be more likely to induce scurvy than the loss of the spirit ration. A great step has been made in abandoning the daily ration of spirits; for Heaven's sake let not that step be lost without sufficient reason and due inquiry. A very ordinary cause for the outbreak of scurvy in vessels proceeding on long voyages is the atrocious adulteration of the lime-juice supplied them, as prophylactic of the disease. It is frequently obtained from Jews, who furnish an article, the acid principle of which is the oil of vitriol, mixed with other trash, utterly useless for the intended purpose, and of so vile a flavour that the sailors are unwilling to take it. This system has been carried out to an enormous extent in some of the whalers going to the South Seas, and in many of the vessels which are employed in collecting guano; we understand that the Royal Navy itself has not escaped. The principal surgeon employed in the late Polar Expedition was himself attacked by scurvy, and lingered long under the disease, although he took the lime-juice with which the vessel was supplied to a great extent. It did not prove of the slightest service to him, although, when the juice is really good, benefit is generally experienced in the course of a few days. The lime-juice in general use has been found by direct experiment to be at least two-thirds less valuable than fresh lemon-juice.

TO CORRESPONDENTS.

"The Duke of Cambridge's Letter."—A Correspondent calls our attention to the very polite letter from the Duke of Cambridge to Mr. T. Wakley, M.P., which is paraded in the "Lancet" of last week. We may inform our Correspondent, that his Royal Highness did not write, as our Correspondent supposes, to Mr. Wakley as an influential individual whose good-will and support were to be obtained; but that Mr. Wakley, in common with half the west-end of London, received one of the common printed *circular letters*, which the Committee of St. Mary's Hospital have issued to all whom they thought likely to give a guinea to a charitable institution wanting funds. The absurd vanity which has prompted the Editor of the "Lancet" to print this letter as if it were addressed to himself individually, and with sign manual by the Duke of Cambridge, is not without a deeper meaning. It is not only a bare-faced puff, but it gives Mr. Wakley an opportunity of saying a good word for St. Mary's, Paddington; and as such good offices are, according to the editor of the "Lancet," worthy of recompense, we have no doubt that there is a plan to deprive the Free Hospital of "Young Liston's"—we beg his pardon, of the "Baby Fellow's"—valuable services, and to transfer them from the purlieus of Gray's-inn-lane, to the more genial climate of the far west.

"Dr. Lightfoot's" excellent paper on Puerperal Mania shall receive an early place in our columns.

We are much obliged to our kind Correspondent who has sent us a report of a trial for murder at Limerick. We regret that our space will not allow us to avail ourselves of our Correspondent's attention—and this although inspectors differ as well as doctors. The case was noticed in our last. We are glad the man's life has been spared, perhaps owing to the vigilance of the Press.

"A Graduate of the London University," even though he be but M.B., may call himself Doctor. Few men would be so discourteous as otherwise to address him. For ourselves, we should as soon think of calling a mere Licentiate of the College of Physicians Doctor, as an M.B. ought else.

"Thomson's Raphia Indica" seems a nourishing and wholesome vegetable production.

"Hyett *v.* the Board of Guardians of the Cheltenham Union" will be noticed, in due course, in our Journal.

"T. M."—On showing due cause, we presume, an apprentice can compel his master to cancel his indentures, or to turn him over to another surgeon.

In removing from the Strand to Princes-street, Dr. Jos. Dickson's paper and drawing have, unfortunately, been mislaid. We still hope, however, to find them.

"H. A., Guy's," says, with respect to the views of the uses of the spleen, in our last: Simon and Schultz, the best authorities on animal chemistry, say, "the rapid removal of fluids from the stomach, can only be explained by the agency of the portæ The remarkably small quantity of fibrine invariably found in the blood of the venæ portæ, as well as the larger proportion of fat and blood corpuscles, being all due to the intestinal canal and the lymphatics." The idea of the spleen giving warmth to the stomach, was Sir Anthony Carlisle's.

"A Reader of the College Library" suggests the necessity of a second or third copy of the "Medical Times," for the gentlemen that spell there. Put it in the order-book, say we.

"B., Cambridge."—Our reporter has attended the last lectures at the Royal Institution, but they were not of medical interest.

"Eliza."—Much difference of opinion exists as to what is really naptha. Pyroxilic spirit, perhaps; not acetone, as usually thought. Try the former.

"Trinity College, Dublin."—We have received the "Dublin Evening Post." It is scarcely fair of our friends of the "Post" to be twitting Sir Phillip Crampton and the anonymous gentleman—Dr. Corrigan?—with their mesmeric absurdities. The "magic crystal," and some nonsensical person standing by, solves all the difficulties and mysteries about Sir John Franklin. We are ashamed of such stuff.

"Curiosus" wishes to be informed, how often breech and shoulder cases occur in proportion to natural labours.

[Out of 6,634 labours which occurred at the Dublin Lying-in Hospital, there were 227 preternatural presentations, 101 of which were breech, and about 26 of the shoulder and arm.]

"Mr. Leigh, of St. Ives," on Medical Reform, next week.

"Mr. Fothergill," on Teetotalism, and "A General Practitioner of 27 years," next week.

"Model Lodging Houses."—We had prepared a notice on Mr. Liddle's remarks on "Model Lodging Houses," which a press of matter obliges us to postpone till our next.

We are unwillingly obliged to omit a portion of our "Hospital Reports," this week.

"Wardrop on the Heart."—We shall be obliged to the several Correspondents, who inquire when this Work is to be finished, to put the same question to Mr. Wardrop himself. We should be exceedingly glad if he would furnish us with the concluding part of his manuscript.

[Advertisement.]

THE ASYLUM FOR IDIOTS.

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SPECIAL APPEAL.

This Asylum was instituted in the year 1847, for the care and education of the Idiot and Imbecile. Much has been done to improve the condition of the Lunatic; but nothing has been distinctly done for the Idiot. He was abandoned to neglect or scorn, and commonly sank down into a state of such unutterable wretchedness as to make death itself preferable to life.

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This is not all. The Board would say little of the difficulty, labour, and expense of working a Charity with such distant localities,—the greater evil is, that everything they do is of a temporary and incomplete character. Besides, no private dwelling affords, by any means, such accommodations as are needful for so *unique* a family. We need a complete separation of the sexes—equally so of adult and youthful life—and still equally so of the cases which are only susceptible of protection and comfort, and of those which are capable of education and improvement. This last class again demands variety of treatment—association, classification, and separation are all requisite. Some cases need retirement, some improve greatly by society, provided much care is used in the assortment.

These considerations, with many of a kindred character, which will readily arise to the benevolent mind, have led the Board to the conclusion, that to do their duty by the trust committed to them, and to work out successfully the great experiment in favour of the most afflicted and debased portion of the human family, they must erect a Dwelling, with all the appliances and facilities indispensable for the undertaking.

PROPOSAL.

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JAMES HOLLOWAY, D.D., ANDREW REED, D.D., } Gratuitous Secretaries.

JOHN CONOLLY, M.D., WILLIAM LITTLE, M.D., THOMAS CALLAWAY, F.R.C.S., } Gratuitous Medical Officers.

Office, 29, Poultry, March 28, 1850.

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ORIGINAL LECTURES.

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ON
CLINICAL MEDICINE.
DELIVERED AT UNIVERSITY COLLEGE HOSPITAL.

By E. A. PARKES, M.D., Lond.:

Member of the Royal College of Physicians, Professor of Clinical Medicine in University College, and Physician to the Hospital.

LECTURE VII.

Case of Tubercular Cachexia.—Tubercles deposited to all appearance primarily in the Mesenteric Glands, and on the Peritonæum, then in the Lungs, the Intestinal Mucous Membrane, the Liver, Kidney, &c., &c.—Laryngeal and Epiglottidean Ulceration.

GENTLEMEN,—I have to bring before you today another case of phthisis, in some respects contrasting with the last. Joseph Pozzi, aged thirty-five, admitted June 9th, 1849; a man of original slender conformation; born of healthy parents; always lived well—temperate—no previous diseases of any kind. He gave the following account of the disease for which he came into hospital. Twelve months before admission he felt out of health, and suffered from pain in the back and loins. After this had continued for five months, he was attacked with great pain in the abdomen, which lasted for four months. He consulted a Medical man, who told him he had mesenteric disease. About one month after the pain in the abdomen commenced, he began to have a slight cough; for four months this was quite dry. For two months before admission the cough had been attended by expectoration of a little frothy mucus. The debility increased; he began to suffer from diarrhœa, and six weeks before admission he was obliged to leave off his work, which was that of a goldsmith.

Such was this man's previous history. On admission he presented the following phenomena:—Originally of delicate conformation, he was very thin and feeble, with a severe and frequent cough. He was labouring under chronic laryngitis; his voice was whispering; if he attempted to speak loud, it became cracked; the larynx was very painful. He had tubercular deposition in the apex of the right lung, and a large tuberculous cavity in the left apex. The following were the chief physical signs:—There was deep, and about equal hollowing of the supra and infra-clavicular spaces on both sides; excavation of both supra-spinous fossæ; more movement under right than left clavicle; percussion moderately clear in the right infra-clav. region, with, however, increased resistance, and a wooden character, in right supra-spinous fossa. In the left infra-clavicular region the note was extremely dull, and the dulness descended as low as the third rib; strong percussion in the left supra-spinous fossa, brought out a slightly tubular note; light percussion gave a perfectly dull note. In the right infra-clavicular and supra-spinous regions, inspiration was jerking and rough; at the end of respiration there was subcrepitant rhonchus; expiration was hardly audible. Under the left clavicle, and in the left supra-spinous fossa, there was cavernous respiration with an amphoric note, gurgling, and extreme vocal resonance. These signs, of course, indicated tubercular deposition at the right apex; and a large cavity at the left. In the other parts of the right lung respiration was free; in the left lung, however, there was more or less deposition throughout. Thus, at the left base, the ribs were almost motionless; during ordinary inspiration there was, here and there, dry crackling, and, on deep inspiration, moist rhonchi with occasionally bronchitic cooing râles. Three or four days before death, it was also noticed that there was decided slight dulness, here and there, at the left base, though by no means commensurate with the extent of rhonchi. The expectoration was copious, greenish yellow, in viscid globular masses, without air, and occasionally copiously streaked with blood.

Such was the state of the lungs. The only change about the heart was systolic bruit at the apex, loudest outside the nipple, and, therefore, referred to regurgitant mitral disease. There were no perceptible alterations of the liver or spleen.

The patient laboured also under diarrhœa of old date, the exact time of commencement being unknown, and there was considerable tenderness of the abdomen, particularly about the umbilicus. The urine, throughout the illness, was small in quantity, varying from 12 to 30 ounces, of a specific gravity of 1026 to 1030, acid, without albumen or sediment.

The patient sank rapidly after admission, and died on the 2nd of July.

The diagnosis in this case presented no difficulty. Without any chest physical signs, these three things would have been sufficient, viz., chronic cough, diarrhœa, and laryngeal ulceration. For you are aware that (excluding the rheumatic and senile forms described by Schönlein) ulceration of the larynx hardly ever, if ever, comes on in the course of chronic diseases in this country, except in five cases, viz., in the tuberculous, cancerous, and syphilitic cachexiæ; and (of course, comparatively infrequently) in farcy, and (very rarely) in bronchocele. Now, in this case, we were certain of deep ulcerations from the severity and duration of the pain, and from the degree, kind, and duration of the aphonia. The voice was not merely roughened, and a little cracked, but whispering and cracked. We were able to put aside, to exclude syphilis; and, of course, cancer, farcy, and goitre did not exist. Even had we not been able to exclude syphilis, the addition of protracted diarrhœa to cough and laryngeal ulceration, made the diagnosis complete; because, although syphilitic ulceration of the intestines will exist, and perhaps cause diarrhœa, the conjunction of this uncommon disease with syphilitic laryngeal ulceration must be singularly rare. Remember this practical rule,—if in a case of ulceration of the larynx in this country, you can exclude syphilis, cancer, and chronic glanders, you may infer the existence of pulmonary tubercle. The exceptions to this rule, if MM. Trousseau's and Belloc's cases are to be so considered, are extremely rare.

But, apart from this, the physical signs of the chest were absolutely distinctive, not merely of the kind, but of the extent of the disease. Now, this is not always the case in phthisis with laryngeal disease. Sometimes, when cavities do not present the conditions proper for consonation of sound, and the pulmonary substance does not present the condition proper for transmission of sound, the respiration is hardly even bronchial, and, if in such a case the chordæ vocales have been destroyed, almost all stethoscopic evidence of a cavity may be wanting.

It is in these cases, if the percussion signs are also doubtful, that the rule above-mentioned, of the diagnostic significance of ulceration of the larynx becomes of great value. Remember only, that in these obscure cases, you must be *certain* that there *is ulceration* of the larynx, and not mere catarrhal swelling about the vocal chords. The distinction is to be drawn from the duration of the case, and from the peculiar semi-whispering and cracked voice, and from the pain. If these symptoms are not conjoined the diagnosis must be qualified. The stethoscope will also sometimes furnish signs, but not invariably; there is no unequivocal auscultatory sign of ulceration. The disease named by Schönlein "Laryngo et tracheophthisis rheumatica," and said to be most common in women exposed to cold, such as washerwomen, may, perhaps, be merely a protracted catarrhal chronic laryngitis, without ulceration, such as we occasionally see in other cases in this country. The senile form, mentioned by Schönlein, occurs only in old men.

The morbid sound at the heart's apex was interesting in reference to its cause. We made out no unequivocal signs of rheumatism, nor could we determine that the patient had himself perceived, at any time, anything wrong about the heart. The condition of the mitral valve, after death, increased this interest, but to this point I must return on another occasion.

We were certain of the existence of intestinal ulceration from the long continuance and the severity of the diarrhœa. For whenever, in a tuberculous subject, you have a protracted diarrhœa, which is not a sequence of dysentery, and in whom there are no signs of organic disease of the liver and pancreas, you may, with certainty, diagnose ulceration, more especially if the stools are yellowish, or greenish yellow, frothy and shaken up, or marked with streaks of blood.

Such was the diagnosis in this case. Let me now briefly give you an abstract of the *post-mortem* appearances.

And, first, of the larynx. The epiglottis was superficially ulcerated on its upper or lingual surface; was pale, slightly roughened, but not ulcerated, on its laryngeal surface. This is unusual, since Louis mentions only a single case of ulceration on the lingual surface, although ulcerations on the lower occurred in about one-fifth of the whole number of his cases. We have unfortunately not noted whether the patient had pain in swallowing. The chordæ vocales were totally destroyed by deep, narrow ulcerations spreading along them. There was no tubercular deposit in or about these ulcerations, which had penetrated in places to the cartilage. Below them the mucous membrane was slightly vascular throughout the trachea, but there were no ulcerations.

The state of the lungs was as follows:—Very slight adhesions at the apex of the right lung; in all the lobes masses of infiltrated tubercle; in the upper, numerous small cavities, none larger than a pea, with greyish irregular walls, formed of compressed pulmonary substance, mixed with tubercle. Between the masses the pulmonary tissue appeared tolerably healthy. In the lower lobe, in addition to the infiltration, there were miliary tubercles. The left lung was universally adherent; there was a cavity the size of the fist at the apex, lined by a soft pyogenic membrane, easily peeled off from the irregular and condensed pulmonary tissue below it; numerous frænа crossed this cavity, and appeared to be only dense pulmonary tissue covered with hard exudation matter, and not tubes or vessels. All the rest of the lung was crowded with miliary tubercles, greyish-yellow or yellow. I need not detain you with the description of these deposits.

The heart was small in size, weighing only 7½ ounces, thus following the usual rule in phthisis. There was no pericardial disease, not even a white spot on the surface. The mitral orifice admitted only the points of two fingers; the flaps of the valve were very much thickened, and corrugated at the edges, yet large and not manifestly incompetent; the circumference of the opening, when spread out, was 3½ inches. The other valves, the endocardium generally, and the cardiac substance, were healthy.

The abdomen presented a great amount of disease. The omentum and mesentery were crowded with grey and semi-transparent miliary tubercles. The mesenteric glands were almost universally infiltrated with tubercle; many of them had cretaceous deposit toward their peripheries; one gland near the cœcum had suppurated; it was as large as a walnut; the pus was thick and healthy-looking. The peritoneal surface of the intestines was coated here and there with patches of grey granular tubercle; these formed broad belts round the intestines of from two to four inches high, and, in the intervals between them, the peritoneal surface was free from tubercle. There were four of these patches on the small intestines; many more, and of a more irregular form, on the large.

The mucous membrane of the stomach, and in a higher degree the duodenum, presented numerous black striæ, probably from melanic deposit beneath the basement-membrane, but these were not examined in this case. In the small intestines there was both ulceration and tubercular deposition. The tubercle was entirely of the greyish, semi-transparent kind, was in the form of hard, round gran

ules, and was seated both independently beneath the mucous membrane, and also in the agminated glands. It could not be decided how the ulcers, which were large, round, and irregular, were formed. Some were decidedly seated in the agminated glands; others were not so placed. They were not numerous, and were chiefly situated in points corresponding to the tuberculous peritonæal deposition. The whole of the small intestine was darkened with the little black lines before noted. There was only slight arborescent vascularity.

In the large intestines there was still greater disease, and of a very interesting kind. Thus, in the cœcum there were numerous granules, or rather nodules, of a grey deposit, under the mucous coat, and between these was a winding and serpentine superficial narrow ulceration, which was evidently not attributable to softened tubercle. In the colon were several patches of tubercular deposition and of ulceration, either of the superficial sinuous kind, or presenting the characters of a large, deepish, round ulcer, with a grey floor, and whose origin was obscure. These depositions and ulcerations were most marked at the spots where the external tubercle was deposited; and indeed there was at such points very considerable thickening of the coats. On making a section of these thickened portions, it was found that the thickening depended not only on the deposit, but on general diffused thickening of the submucous tissue, and on manifest hypertrophy of the circular muscular fibres.

In addition to these lesions, the surface of the liver was coated over with a dry, fragile, and easily removed false membrane, which was thickly interspersed with grey miliary tubercles. Below this the serous coat of the liver was found, pale, smooth, and unaltered, except that beneath it were a few small, semi-transparent tubercles. There were none in the substance of the liver. There were some tubercles of the same kind beneath the capsule of the left kidney, otherwise these organs and the spleen, and the encephalic organs, were healthy.

Let me now direct your attention to the following points about this case:—

1. What was the order and sequence of these affections?

As far as the history can guide us, there certainly does appear to have been abdominal disease before lung affection; for the patient had intense and long-continued pain in the abdomen, without the least sign of cough. Moreover, the appearance, after death, of the abdominal organs, evidently pointed to old disease; the adhesions of the peritonæum were old; the cretaceous retrogression of the mesenteric glands implied considerable age. This, however, proved nothing as to priority, as the lung disease was itself of some standing.

But there were three distinct affections of the abdomen, viz.: tuberculous peritonitis, tuberculous mesenteric disease, and intestinal ulceration. If any of these were anterior to the lung disease, which was it? The severe abdominal pain indicated rather peritonitis than mesenteric tuberculosis; moreover, peritonitis is less unequivocally secondary to lung affection than tubercular mesenteric disease, in individuals over the age of 15 years. In all but one of Louis's cases, the mesenteric disease was manifestly posterior, in point of time, to the pulmonary deposition, and even in this case it may have been so; whereas there are several cases of peritonitis recorded by Louis, in which the lung affection was very slight; and in all the cases in which the peritonitis was marked from the first, the lung disease was less advanced than in those patients in whom chronic peritonitis did not exist. As to the intestinal ulceration, we did not know the date when diarrhœa set in; but it was not likely to have been the first disease, as it is seldom attended with the severe pain mentioned here, but, on the contrary, is accompanied merely with griping and tenderness, or is absolutely painless. It by no means follows, as might *à priori* be supposed, that the mesenteric disease in this case was consequent on the intestinal ulceration. The two diseases are certainly generally independent, and bear no relation in point of severity to each other; but possibly the ulcerated mesenteric gland near the cœcum may have been a consequence of inflammation consecutive on the ulceration, as will occur sometimes, though very rarely, in dysentery.

The discussion as to the relative priority of the abdominal and pulmonary disease is particularly interesting in this way. Louis's law, which is almost invariably, though not quite, true, is, that when tubercles form in individuals over 15, they are found in the lungs, no matter where else they are found. But, in persons under 15, other organs take precedence of the lungs. Now, when, in persons over 15, we find, as an exceptional case, that other organs take precedence of the lungs, and discover that these organs are the same as those which thus in children precede the lungs, may it not be surmised, that this is in consequence of a deviation or return to the law which governs the formation of tubercle in young persons?

The laryngeal affection was manifestly secondary.

2. The mesenteric disease, after formation, probably continued to advance in some places, and retrograded in others, till the close of life. At one point, indeed, actual inflammation had set in, and a gland had suppurated; so that we had in some glands fresh tubercles, in others cretaceous deposit, in a third pus. Let me call your attention to the possibility of a suppurated gland bursting, and exciting peritonitis. This will occur in phthisis, as in typhoid fever.

3. The peritonitis did not produce effusion of fluid, although there was infinitely more tubercle deposited here than in the former case. Perhaps there may have been effusion, and then absorption of fluid, as sometimes happens, although there was no evidence of this in the history of the case. The mesenteric disease did not, of course, produce ascites.

4. The intestinal ulceration was particularly interesting. You will remember, that, in the case I last brought before you, the ulcerations were truly tuberculous, *i. e.*, resulted from the liquefaction of yellow tubercle; but here the intestinal tubercle was grey, hard, and firm, with no tendency to soften, and the ulceration was altogether distinct from it. The tubercle was most distinctly of the grey or almost white kind,—a fact which I repeat here, as I observe that Lebert, in his late excellent work, seems to think that tubercle deposited under the mucous membrane of the intestine is always yellow.

5. Remark here that this tendency to ulceration, this "ulcerative diathesis," as Lebert terms it, in the intestinal mucous membrane was repeated in the laryngeal; and here also apparently, without absolute deposit of tubercular matter. Louis has thrown out the opinion, that although these tracheal and laryngeal ulcerations are evidently not due to the irritation and acridity of the expectorated matter, yet that the constant passage of such acrid sputa over the membrane may determine the locality and the size of the ulcers. In this case the occurrence of ulcerations on the upper surface of the epiglottis is quite opposed to any influence of this kind.

6. The lung affection in this case presented nothing unusual; the left lung was most diseased, the right lung being, according to Dr. Walshe, the most frequently and severely attacked in men. The pleuræ were comparatively little affected, and although the pleura of the left lung was thickened at the apex, this was not nearly so much the case as in our first patient, although in the present instance the cavity was of enormous size.

7. We had an instance of tubercles of the liver, and also of the kidney, a lesion very rare in persons dying of chronic phthisis over the age of fifteen years.

Now, taking these two cases together, let me briefly enumerate the post-mortem appearances we have noted in this tubercular cachexia, or, to give it a title drawn from its principal manifestation, phthisis pulmonalis. We have seen tubercular deposition into the lungs, the bronchial glands, the peritonæum, the mesenteric glands, the intestinal mucous membrane, and on the surfaces of the liver and the kidney. We have seen tubercular ulceration of the intestinal membrane, non-tubercular ulceration, (*i.e.*, ulcerations not dependent on local deposition) of the same part, non-tubercular ulceration of the larynx and the epiglottis. We have had inflammatory exudations into the pleuræ and peritonæum of a peculiar kind, and perhaps inflammatory adhesions of the pericardium as a direct or indirect result. A long list of lesions; but these are yet not nearly all which may occur in this terrible disease.

LECTURES
ON
OPERATIVE OPHTHALMIC SURGERY.

DELIVERED AT THE CENTRAL LONDON OPHTHALMIC HOSPITAL.

By H. HAYNES WALTON, Esq., F.R.C.S., Surgeon to the Hospital, and to the St. Pancras Royal General Dispensary.

COMMENCEMENT OF THE SECOND PART OF THE COURSE.

LECTURE IX.

ARTIFICIAL PUPIL.—Definition.—Arrangement of the Subject.—Review of certain Conditions, local and general, with Reference to the selection of a proper Time for Operating.—The State of the Retina, the most valuable Guide by which to determine the Admissibility of an Operation.—Changes in the Iris rendering it unfit for Operation.—Selection of a Position for a False Pupil.—Size for Pupil.—Question whether an Artificial Pupil should be made while the other Eye is sound, or nearly so.—Degree of imperfect Vision that renders the Formation of an Artificial Pupil justifiable.

GENTLEMEN,—By artificial pupil, is understood, an operation on the iris, by which a passage is provided for sufficient rays of light to be admitted to the retina, for the exercise of vision, when disease or accident has rendered the natural pupil inefficient.

In following out my subject, I purpose to arrange under heads only those chief states of the eye that require our aid, together with the appropriate operations; and to omit the various modifications of them that may be occasionally met with, because the treatment of the examples that I shall adduce will embody the principles of every available surgical measure. It is necessary first to discuss a few preliminaries.

An eye that shows traces of active or of chronic inflammation, is unfit for the formation of an artificial pupil; there should be a long interval after the cessation of any inflammatory action, before an operation is undertaken; that interval must be conditional, and regulated by circumstances, and especially by the origin of injury to the eye. When, for instance, it has arisen in syphilis, or gout, or rheumatism, or struma, would it not be most imprudent to operate while the system is yet contaminated with any of these diseases, on account of the great probability of the return of severe local inflammation? Again, when iritis, or choroido-iritis, has been the primary affection, would not luminous spots or flashes, or intolerance to light, clearly indicate, that the period for operating had not arrived? I do not regard the existence of muscæ, except when very large, as a contra-indication to operation, because they are so common in eyes that have no other imperfection, and are very rarely absent when an eye has been invaded by deep-seated inflammation.

It is not uncommon, when the health has been much impaired and again renovated, for an eye to improve considerably, both in its discernment of light, and in its physical characters; and many an eye that at first seemed in a hopeless condition, has been brought to a proper state for operation. Thus it is, that an iris that has been for months apparently in a permanent state of morbid change, will loose much of its dulness, and even recover some of its colour; and a cornea that has been densely opaque will clear in a manner incredible to those unaccustomed to observe eye diseases; indeed, so great may be the restoration of the cornea, that an operation for an artificial pupil should never be attempted because of such opacity, till every suitable means had been tried for its removal, and a considerable time allowed for their operation, as well as for that of the restorative power of nature. The importunity of patients, and the anxiety of surgeons lest they should appear to be backward or negligent, are not unfrequent causes of premature, consequently, usually unsuccessful operations.

A female came to me shortly after having had both eyes unsuccessfully operated on, by extraction of the cataracts, to ascertain if any degree of sight could be recovered. I told her that one eye admitted of an artificial pupil being made, but that she must abide her time. On several occasions, extending over a period of many months, my intentions of operating at fixed periods were necessarily relinquished, because of attacks of inflammation in the eye,

and she became much dissatisfied with me, for she was very desirous that I should operate, and ceased to attend. In all probability she went to some other surgeon.

There are instances where closure of the pupil is the only trace of mischief that the eye has sustained, of which I have pointed out to you some examples, arising from traumatic causes, but when the necessity for an artificial pupil arises from inflammatory causes, especially of long duration, the globe rarely becomes freed from an unnatural vascularity; which, in most cases, must be regarded as an irrecoverable state of the bloodvessels, rather than as evidence of the presence of those phenomena that constitute inflammation. If the original disease has long passed away, and a fair trial has been given to those means calculated to subdue inflammation; if the health is good, and the eye not productive of any inconvenience beyond the loss of sight, and if there is much encouragement for hope from the soundness of the retina, I consider such varicose condition of no importance, and do not hesitate to operate.

An eye may rapidly become apparently fit for operation after the pupil has been closed. On one occasion, I made an artificial pupil three months after a cataract had been extracted, and I never had a better result. I freely confess that I was much too premature, and ran great risk of failure. Now, I could not be induced to repeat such practice, nor would I operate even under the most favourable conditions of the eye, for triple or quadruple that time.

The condition of the retina is that by which we are to judge of the admissibility of an operation, so far as the roundness of the eye is concerned. It is not often the only internal structure of the eye that suffers lesion, when closure of the pupil arises from inflammatory causes; but, with other parts, participates in the general invasion of disease; and its imperfection may usually be taken as a key to the degree of damage the eye, as a whole, has sustained. It would be useless to enumerate, for the sake of guarding you from operating injudiciously, all the various appearances of disorganization that the eye may assume. It may be pretty broadly laid down, that as long as the retina retains the power of receiving impressions, and the cornea, is sufficiently clear, the formation of an artificial pupil may be undertaken; and it must be remembered, that a damaged retina, even when it is very much changed, may afford vision enough to rescue its possessor from the misery of total blindness. It must be a very rare occurrence, indeed; perhaps it is just possible, for the impressions of light to be cut off from a sensitive retina by changes in the parts anterior to it; yet, if the retina is feeble, and with closure of the pupil there exists capsulo-lenticular cataract, it would be difficult to decide whether an operation should be done, that is, whether it were worth while to be undertaken, were it not that no possibility of a chance of restoring sight should be neglected. Hence, an operation must occasionally be done when there is but a faint hope of any degree of success; yet a knowledge or a broad suspicion of the actually-diseased condition of the eye carries its value, by enabling us to state with a tolerable or sufficient degree of accuracy, the amount of hope that a patient may entertain, or to point out clearly that an operation is but a forlorn hope—a matter of experiment. I must not altogether omit to make some mention of the pathology of the iris, because that part is so much, I should say mainly, concerned with the subject before us; but my remarks must be general and concise, as I shall have to speak of it so frequently as I proceed. In proportion to its discoloration and loss of fibrous appearance, is it less favourable for an operation, and less likely to maintain patent the aperture that has been made in it; and, when added to those changes, it bulges much, which is, I suppose, owing to its muscular property being lost, the eye is for the most part quite ruined as an organ of vision.

There is much diversity of opinion regarding the most advantageous spot for an artificial pupil, when a central position, obviously the best, is denied us; but all parts of the circumference of the iris are exposed to our choice. Judging from my own experience, I should say that the range of vision is more extensive, and the power of vision greater, when the pupil is downwards than elsewhere; and this is borne out by the judicious statement of Mr. Guthrie, to the effect, "that the lower and inferior parts of the iris are to be preferred for making a pupil, because the line of vision, being through that part of the eye, is less removed from its natural axis, and less squinting is occasioned than when vision is acquired in any other direction."

If the aperture is directly downwards, there will not be any squinting. Mr. Guthrie selects as a first choice, "the inferior part of the iris inclining inwards;" and next, "the internal, a little below the transverse diameter." He further says, that a decided preference of a position not higher than the centre of the iris is founded upon the natural position of by far the greater number of objects of vision which it is essential for a person to see, being viewed forwards or downwards. Lawrence gives the preference to the nasal side of the iris, on the level of the natural pupil, and after that to the temporal side. Mr. MacKenzie says, if the operator has a choice of placing it behind either the nasal or temporal edge of the cornea, he ought to prefer the former of these two situations, as affording a more useful degree of vision, and causing less deformity.

That the superiority of a spot can be demonstrated according to the law of optics is certain enough, but for practical results other conditions must be taken into account, such as the situation of the eye with relation to other parts of the face. Again, were an internal position proved to be superior, the difficulty, and frequently the impossibility of operating safely and effectually on that part of the iris, with the exception of detaching it from its ciliary connexions, arising from the impediment the nose offers to the use of instruments, would prevent us from availing ourselves of it, and make other parts practically superior. When I cannot effect a downward position, I try to make it downwards and outwards,—a direction always preferred by Mr. Tyrrell, and thought by him to be superior to any other. This conflicting testimony of authorities, which arises from several causes, is very puzzling. It should stimulate operators to embrace every opportunity of observing for themselves.

Students are very likely to be misled by diagrams that represent plans for the formation of a pupil. Sometimes various figures are sketched out on an iris with much ingenuity; they are merely the result of an artist's imagination, and not a guide to what may be effected. Practical surgeons well know the very frequent impossibility of making a pupil of any predetermined figure. No operator should be dissatisfied with himself, if he can effect, at the spot he desires, an aperture of any form, provided it be ample.

There is little risk of a pupil being made too large, for, with the difficulty of giving it sufficient dimensions, it is seldom that it does not afterwards contract, more or less. At the time of operating, it is impossible to say what will be the future form or size of the pupil; but it must be remembered, that a small aperture in a flaccid iris will expand when the chambers of the eye are again filled with aqueous fluid; and that, until then, its absolute size cannot be judged of. It is only by practice that it can be determined when a sufficiently large opening has been made. The state of the iris requires to be taken into account. If I were to give any rule of guidance for the maximum size of the pupil, I should say, that there should be sufficient iris around it to intercept at least the external third of the rays of light transmitted by the glass that is substituted for the natural lens, or else there will be confused vision by the aberration of oblique rays. In other words, the rays from the circumference of the lens would not be refracted to a focus. When the pupil is to be formed at the side of the iris, these calculations are, practically speaking, of no avail, and, in all probability, circumstances will limit its size.

As a general, indeed as an almost universal, rule, an artificial pupil should not be made in one eye while the other is sound, or nearly sound. Unless the restored sight equals that of the other eye, and the optic axes can be made to correspond, we shall fail in our attempt at improvement, and most probably produce confusion of sight, or double sight, or squint. The same objection applies to the formation of two artificial pupils in the same person. There is an exception to this; it is when a small portion of the pupillary edge is adherent to a lateral part of the cornea, and the connexion can be easily cut through. My friend, Mr. S. Browne, of Belfast, Surgeon to an Ophthalmic Institution of that town, tells me, in a communication I have just received from him, that in four such instances, in each of which only one eye was affected and the other sound, he operated, and the pupils were very nearly restored to their natural state, and the patient much benefited.

A continental writer, Desmarres, makes a different statement. He says, that if an artificial pupil is made on the inner side of one eye, while the other is sound, the optic axes may be made to agree, and considerable benefit conferred; that the necessary conditions for success are, that the pupil is but partially adherent either to the lens or to the cornea, and that the internal part of the cornea is clear.

Why a dissimilarity in the pupils should not always be followed by disturbance of vision, I am not able to say; I only know the fact, that under apparently the same circumstances, when the pupils disagree, sometimes there will be disturbance, sometimes not any.

We ought not to be so precise here as in cataract, in the observance of the rule not to operate on an eye that its possessor considers useful; of course all will depend on the amount of usefulness, because the conditions are different. We should avail ourselves of those exceptions which advantageous circumstances may enable us to embrace, or else there must be considerable hindrance to the good that may be afforded. For instance, two eyes that are differently damaged structurally shall be functionally deranged in about an equal proportion. In the one, it may be impossible to produce any improvement by operation, the altered state of the iris, or of the cornea, or of both, not admitting of it, or, perhaps, from other causes, too much risk of failure would be incurred in the attempt. In the other, there may be every requisite, local and general, for the success of an attempt at amelioration; the iris scarcely injured, the cornea clear, the system healthy; more than this, the conditions may be so favourable that there would be every probability, should a first attempt be abortive, that a second may be resorted to.

ORIGINAL CONTRIBUTIONS.

PUERPERAL MANIA; ITS NATURE AND TREATMENT.

By THOMAS LIGHTFOOT, M.D.,
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"Tota Medicina est in observatione."

There is little doubt that the formidable disease to which I feel desirous of calling the attention of my professional brethren has been known from all antiquity; at least among civilised nations. But, however this may be, it is a remarkable fact, showing the slow progress of substantial practical knowledge, that it was reserved for a writer almost of our own days, to place before Medical men the first Treatise on this disease really meriting the name. The author to whom I allude is M. Esquirol, the well-known head of the establishment, at Charenton, near Paris. To him we owe nearly all our positive knowledge in respect of this serious malady. It has been my lot to witness some cases of this disease, as well in my own practice as in that of others, and thus I felt, as many no doubt similarly situated have done, the want of some clear and distinct history of the actual state of knowledge of the complaint; its symptoms, causes, and treatment. With great regret have I observed the obscurity which pervades so many of the most important points connected with it; the sad results of confounding it with other diseases; the difficulty of getting at data to be depended on; last, and not least, the conflicting mode of treatment, and the contradictory views taken by esteemed writers of its causes and intimate nature. It is not so much with any pretensions to remedy these difficulties as in hopes of calling the attention of those more favourably placed, that I here embody the

result of my own limited experience and reflections. Some of my juniors I would fain hope may feel obliged at my so doing; this little memoir may prove a means of calling their attention to cases of extreme urgency which they may encounter in practice, forewarning them, and so saving a life, and perhaps a reputation. On the other hand, I feel convinced that many of those senior to me will share in the surprise I have myself felt at the conflicting views still held in respect of nearly every leading question connected with puerperal mania.

Although the learned work of M. Esquirol bears on its title-page a date so late as 1838, it must not for a moment be supposed this is the true date of his labours and inquiries. It marks merely the completion of researches and publications extending over a period of forty years. He precedes, then, many authors, who have noticed his work cursorily, or failed to quote it. To him belongs the merit of viewing the disease, not as a mere accident of the obstetric condition, but as a formidable complaint meriting a special examination. He first gave it a name, if not expressive of its true nature, at least devoid of error. In this way alone can we hope to make progress in Medicine; the very position which the disease holds in obstetric works is calculated to mislead the student. The title of the memoir of M. Esquirol shows the philosophic way in which he proceeded. It runs thus:—"*De L'Alienation Mentale des Nouvelles Accouchées et des Nourrices;*" that is, on the mental alienation of those recently delivered, and of those suckling their children. Thus, from the heading itself we learn that puerperal mania is not a disease which of necessity must follow, at a short interval, the puerperal condition; on the contrary, it may occur at a long interval after delivery, when the peculiarities of that state may be supposed to have subsided or even disappeared, and thus, without the parade of criticism, he throws significant doubts as to the correctness of the term *puerperal* used in this sense, and as we proceed we shall find that neither his experience nor theoretic views give any countenance for the subdivision of such cases into "those with a strong fever, great excitement, and quick pulse, who generally die," and those "showing less violent symptoms who generally recover." This vague way of classifying the diseases he repudiates, leaving in the mind, I think, of those who compare his works with his contemporaries, that phrenitic cases have too often, I fear, been confounded with maniacal ones, leading to sad results; the adoption of a practice far too feeble for the one, but fatally active for the other.

M. Esquirol then scrupulously avoids talking of cases of phrenitis, or inflammation of the brain, as being not necessarily connected with the subject. Dr. Baillie also, I think, must have been perfectly alive to this distinction, for of all Physicians he is described as being the most skilled in diagnosis. When he talked somewhat lightly, as it were, of the mortality of puerperal mania, he must have taken for granted that the Practitioner had in no instance confounded it with phrenitis. Whether M. Esquirol did or did not witness the phrenitic cases occurring shortly after delivery, is not a matter of much moment to our present inquiry.

2. Neither does M. Esquirol consider it necessary to say anything of the transient delirium occasionally appearing after delivery, or during the milk fever, as it is termed—this, in fact, disappears, promptly relieved by the flowing of the lochia; by their diminution, if too abundant; by the mammary secretion taking place, or by the mere recovery of strength; nor does he think it necessary to speak of those who, in a hasty moment, destroy their infant. Inquiring into the mania which attacks those just delivered, and those who suckle their young, (*nourrices*), he adopts an order of arrangement which, in the following observations, I have carefully attended to.

3. A question has been raised in Britain, I think, whether the married or unmarried are most susceptible of this disease. I know of no data to decide this point. The disease would seem to be more frequent than is usually supposed. In the great Hospital and Infirmary of Salpêtrière, such patients bear a proportion to all others mentally deranged of a tenth or 12th. In four years, 1119 cases of mental derangement were admitted, and from this cause alone there were 92. Such data differ widely, no doubt, from the casual observation of Dr. Wm. Hunter, that in the course of his practice he may have seen from 20 to 30 cases of puerperal mania, (since we must still use the phrase,) but we know not the amount of that practice, and so the observation leads to nothing.

M. Esquirol thinks that such cases bear a higher proportion to others amongst the rich, and may even amount to a seventh.

4. The period of attack varies; but on this point his remarks are less distinct. The period seems to extend from the 3rd to the 4th, or even to the 15th or 16th day. He thinks it still worth while to notice, and even to combat, the theories of "milk depôt," and deposits of milk by metastasis.

In various provinces or departments, notions like these may probably still linger in France, amongst the inferior educated class of Practitioners, called "Officiers de Santè,"—the most likely persons in the world to perpetuate these otherwise by-gone and oft-refuted errors. I had thought a serious refutation of such nonsense to be, now-a-days, a work of supererogation; but probably M. Esquirol, knowing that popular errors are all but eternal, judged it the most prudent course to notice in the way he has done the exploded doctrine I now speak of.

5. Although the symptoms of puerperal mania vary, there is still a certain uniformity or similarity in most, rendering the detection of the disease certain, with care. The mind is violently disturbed; the intestinal secretions and excretions altered; the perspirations and breath fetid; the pulse rapid and small; appetite gone; there is thirst and wasting; I know of no pathognomonic symptom.

The more usual symptoms will perhaps be the better understood by the brief details of the following case:—

Case 1.—Mrs. C., aged 35, fair hair and light complexion, the mother of several children, was seized on the 12th day of her confinement with maniacal symptoms. The night previously she had been very restless; sleep broken. On visiting her about 11 a.m. I learned that she had been very loquacious for several hours. Her countenance was wild and unmistakeable; pulse about 110, small, with little fever. She manifested great irritability of temper, and denied that the infant was her own, and occasionally gave utterance to depraved language. No undue heat of scalp; breasts moderately full; lochia declining; tongue slightly furred; breath unusually fetid; bowels confined. The child was taken from the breast for two days, and in the interim they were occasionally drawn. The treatment adopted was warm purgatives, narcotics, anti-spasmodics and nervine tonics, quinine and iron; the diet consisting of a moderate quantity of animal food daily, and a little port wine. In the above case, the maniacal symptoms continued more or less violent for the space of three weeks; at the end of the fifth, the patient had so much improved in mind, health, and spirits, that I suggested a journey and residence at the sea-side, where she remained only a fortnight, and returned home perfectly convalescent. I attended her in a subsequent confinement, which she passed through without manifesting a symptom of her former hallucination.

All Physicians who have seen such cases must have noted the small and quick pulse, on which port wine, or port wine and water, employed freely from the commencement, exercises a most beneficial influence. (a)

Case 2.—Mrs. W., aged 26, dark hair and dark complexion; the mother of two children, and of strong religious feelings, was seized with maniacal symptoms five months after her confinement. For several days previous to my seeing her, I understood she had attracted the attention of her family and friends, in consequence of her peculiar manner and sullenness of behaviour. When religious matters were introduced, she then became violent, and indulged in a strain of religious conversation. I found she had connected herself with a religious Society, in which she was a very active member; hence the probable cause of the following symptoms:—pulse 100 and small, pupils dilated, countenance gloomy, loss of appetite, and refusal to take food, bowels constipated, excretions dark; urine pale and abundant. The treatment adopted in this case was free purgation, narcotics, tonics, ablactation, and removal from her friends. At times she appeared exceedingly fond of her child, at other periods she would deny her maternity. She continued in a variable state for the space of two months, but ultimately recovered. The immediate exciting cause in this case, no doubt, was religious excitement acting on an already feeble constitution. The above cases show the nonutility of depletory measures, and the great necessity for allaying nervous excitement by other remedial means. Dr. Billing has done the Profession good service in pointing out, in a most philosophic manner, the way in which stimulants, for example, may become tonics, as also the true *modus operandi* of other therapeutic weapons, by which the practitioner can with safety encounter disease. The following passages from his pen are so judicious that I take the liberty of quoting them (a)—

"Delirium *sine febre* will occur under a variety of circumstances where morbid sensibility and over excitement of the nervous system exists, with exhaustion or a debilitated constitution. Cases of this kind occur after parturition from exhaustion, constituting examples of puerperal mania sometimes misunderstood. In those cases where there is want of sleep, opium is generally preferable to stimulants alone, through its producing the tendency to sleep, without so much increasing the force of the pulse."

"Many cases of mania are simply cases of delirium *sine febre*, and would be aggravated by depletory or sedative treatment, and the patient would either die, passing into the coma of inanition; or, when the constitution began to give way, a change might take place, and a febrile relaxation of the capillaries of the brain change the entire character of the complaint, as we know deranged persons have become sane, or, as it has been quaintly denominated, 'had a light' before death."

Of the 92 cases spoken of by M. Esquirol, 8 were affected with dementia, 35 with melancholic monomania, 49 with mania.

They never became idiotic for a very simple reason.

In respect of ages there were—

22	from 22	to 25	years.	
40	" 25	" 30	"	
16	" 30	" 35	"	
11	" 35	" 40	"	
2	"	" at 43	"	

The disease, then, is dependent on child bearing, or at least consequent to it, and essentially originates in this condition, and this seems to have been the decided opinion of the illustrious Boerhaave; the period may be remote, but still preceded by it. This, I think, cannot be doubted. But this does not enable us to decide on the real causes, exciting or proximate; these have been considered as a hereditary predisposition, an extreme susceptibility of the nervous system. Previous attacks have been enumerated amongst the immediate exciting causes—errors in regimen, moral causes. Now, these explain but little; exposure to cold, M. Esquirol thinks, is most to be dreaded. In ten cases this seems to have given rise to the attack. I need not say how doubtful this is, and how difficult in such cases it must ever be to arrive at the truth. The lochia may or may not be suppressed, and the same remark applies to the mammary secretions. Of the direct or proximate cause I shall speak presently; the actual state, in fact, of the head and other organs; for it comes always to this—What is the condition of the organs after death? What appearances, what morbid phenomena has the disease left? If constant, invariable, and distinct, they note, undoubtedly, the true nature of the complaint, and give some guide to practice; if trifling in amount, variable in position, uncertain, disputed, then such after-death appearances are of no value, and lead to nothing.

With the Physician, the diagnosis must ever be

(a) The real nature of the morbid pulse could not be well understood prior to the discoveries of the physiological condition of the healthy pulse. This only took place in 1812.—"Observations on the Diurnal Revolution of the Pulse" in *Edinburgh Medical and Surgical Journal*, 1814, by Dr. Knox.

(a) Vide "First Principles of Medicine."

the first object; with the patient the cure is everything. As regards the diagnosis, we have seen the danger of confounding this disease, puerperal mania, with phrenitis, or with any other sthenic condition of the system. Dr. Gooch has shown that a mistake of this kind leads to a practice all but uniformly fatal. But long prior to Gooch's observations, many distinguished practical men had obviously recognized this truth. In a practical work of an unostentatious character, the sixth edition of which appeared in 1809, and the first in 1780, by Dr. Alexander Hamilton, there is a section which places beyond all doubt that he, at least, understood the disease as thoroughly as does M. Esquirol. It is true that pathology, as it is now called, had not been then systematically investigated. No clear account was taken of the after-death appearances. The first edition of the work, it is lamentable enough to think, was published by a Professor in a University for the use of midwives! It was afterwards extended, and a more befitting view taken of the whole subject. But the very title of even the latest edition, published in 1809, shows the degraded state of this great branch of our Profession. The work is called "A Treatise on the Management of Female Complaints." Let my professional brethren read over Dr. Gooch's cases, and then reflect on the deplorable mismanagement of the cases I now speak of, even by practical men, who may unhappily not have given their careful attention to the subject. But to return to Dr. Hamilton. Profoundly ignorant, as he probably was, of all pathological and physiological research, his practical knowledge was greatly superior to the gentlemen who treated the fatal cases enumerated by Dr. Gooch, though living and practising more than half a century before them. To him, no doubt, may be traced the odd way of viewing the disease as a mere accidental concomitant of labour. He discusses the whole subject in a short section of some three octavo pages, under the head of "Delirium." The section absolutely has no other title. In this short section, however, we find much that is valuable in practice. Whilst reading it, the idea continually occurs to the mind, that all subsequent writers must have had the very section in view, although they seldom quote it. He carefully distinguishes the temporary delirium accompanying the milk fever or weed, which ceases when the secretion is established. He also notes, especially, the delirium caused by phrenzy, which he describes as not of common occurrence in this climate. This disease (phrenzy), he says, proves fatal about the third or fourth day of the attack. He calls it an alarming disease; he seems to have thought it uniformly mortal; and he notes, as the circumstance distinguishing it from madness, that the ideas are quite incoherent How much is here said in so little space! He treats in the last place of *mental derangement*, which he considers as a most serious affliction, remediable, however, with care. Melancholy he esteems as the most obstinate and the most alarming form of this disease. The whole description, which is excellent and practical, occupies but a page. He was aware, and he notes it as a curious and an important fact, that sometimes suckling the infant produces melancholy or other modifications of this complaint. Of the treatment he says nothing in the section just quoted; but enough has been shown to prove, that he did not mistake phrenzy for madness, nor *vice versa*—a mistake still more to be lamented. Dr. Baillie unquestionably was well acquainted with the practical point I now speak of, and so, no doubt, was Boerhaave. Van Swieton and he long ago cautioned the Physician not to have recourse to bloodletting, except in cases of the most extreme urgency. These great men understood practically what Drs. Kelly and M. Hall demonstrated experimentally on the lower animals, namely, that congestion of the vessels of the brain often follows great loss of blood, and is often produced by debility or less strength. But before I consider the most approved remedial means for this lamentable disorder, let me mention, in a few words, the result of the treatment by those whose experience has been so much more extended than my own.

Of the 92 cases of *puerperal madness* treated by M. Esquirol, 55 recovered, 6 died, and 31 remained incurable. The comparative rarity of a fatal termination may have arisen from the circumstance, that phrenitic cases would generally be recognised as such, and so would not, or could not, be sent to the General Hospital. The larger number, then, of these would die in their own houses. We have seen that, in private practice in this country, they have been confounded with puerperal mania by some, and the same treatment has been occasionally extended to both with the most lamentable results. The comparative rarity of a fatal termination in pure puerperal mania corresponds with Dr. Baillie's view; he seems to have thought that death was rare, and so no doubt it is, comparatively; but complete recovery, on the other hand, takes place more seldom than in cases of mania originating in other cases; such, at least, is the opinion of M. Esquirol. Mr. Haslam's experience gives 35 incurable of 85 patients; Dr. Burrows, 35 recoveries of 57; these results are not favourable, and should stimulate the Profession to further exertions; for, of all misfortunes, the loss of reason is the greatest; it is the mother, too, of a family who generally suffers in this instance. Dr. Gooch recollects only two in his practice who remained unrelieved. The prognosis, then, as far as regards life, is upon the whole favourable,—it surprised M. Esquirol,—but, as regards the recovery of reason, it is not favourable, and it is to this circumstance that the physician ought to direct especial attention. Now, to effect an improvement in the practice of this or of any other disease, there are but two methods or plans to be followed:—the first is the empirical, whose *forte* lies in specifics; the second is, the rational proceeding by scientific methods, investigations, and deductions.

Between the physiological condition of the brain and its pathological states there is no connecting link whatever; both are equally unintelligible. The healthy functions are a mystery, towards the explaining of which anatomy furnishes no clue; the pathological condition, unsound mind, untraceable to, and inexplicable upon, any given anatomical or physiological theories.

Science, then, gives no aid in the elucidation of the diseased conditions of the brain, in as far as the healthy structures go,—no *rationale* of symptoms or treatment. Let us now attend to the condition of the organs when their functions have become disordered.

Dr. Ellis, as quoted by Dr. Ramsbottom, whilst speaking of the morbid anatomy of the brain, in cases of mania, generally seems to lay it down as a principle, that mania constantly depends on an inflamed and softened state of the brain. As regards puerperal mania, this opinion is most certainly an incorrect one; and, further, I would venture to dispute its accuracy, in maniacal cases generally. I find it to be the opinion of those whose extensive anatomical knowledge of healthy as well as diseased organs entitles to every attention, that such views as the one I have just quoted have arisen from inaccurate observation. They place in the same category the opinions of those who fancy, that in mania the brain becomes so dry and hard, that "it may be kicked about like a foot-ball,"—the expressive, though rather inelegant phrase of a Physician, who had read much but seen little. All such views, sound anatomists, I find, consider as wholly without a foundation or observation. Nor do they treat with more ceremony the opinion of an excellent practical Surgeon, to which I shall now advert. It is as follows:—

Puerperal mania, according to Dr. Burns, of Glasgow, depends, for its proximate cause, on inflammation and softening of the spinal marrow. It is greatly to be regretted that Dr. Burns has not backed this opinion by that amount of evidence which so important a statement clearly requires.

It is at variance with all other received opinions; with those of some distinguished and experienced anatomists I have spoken with. The direct and positive evidence of M. Esquirol is also against it: he says, that the after-death examinations of such cases have shown nothing tending, in the slightest way, to explain the symptoms of the disease or the cause of death. The alteration in the structure of the cranium occurring in some cases; its thickening and condensation; the deposition of additional osseous layers at various points, and those especially on the inner surface of the concave portion of the frontal bone, with spiculæ or projecting nodules more or less intimately connected with the dura mater, whose intimate structure they seem to affect, is an appearance meriting some notice.

On the concave side of the frontal bone in many crania, but more especially of women who have borne children, there may not unfrequently be observed several additional layers of bone added to the naturally existing ones. They render this part of the cranium thicker than usual, and they give rise to slight irregularities on the aspect, to which the dura mater adheres more or less intimately. The cause of these osseous deposits does not very clearly appear. By some German surgeons they have been thought dependent on child-bearing, and they go so far as to think, that with each birth an additional layer of bone is laid down on the inner or cerebral aspect of the frontal bone. But I cannot find that this thickening of the cranium is a constant accompaniment of puerperal or of any other mania. One thing is certain, however, that an ivory and thickened condition of some parts of the skull is occasionally mentioned by M. Esquirol, in the after-death appearances of those who died affected with this form of insanity.

It will be conceded, however, on all hands, that a more extended and minute inquiry is still requisite on this and on most other points connected with puerperal mania. The tissues, and those more especially of the uterus and its appendages; the actual condition of its veins and their contents; the lymphatic vessels of the uterus especially, which are known to suffer so much in puerperal fever; the condition of the abdominal portion of the sympathetic system of nerves, and of the communicating branches connecting this system with the spinal nerves and spinal marrow. All these points, and others I need not here enumerate, would require to be elucidated by an anatomist competent to the task. I have met with a judicious remark in Dr. Gooche's work, bearing so appropriately on this matter, that I have thought it might be useful to quote it:—"To make the examination of dead bodies conclusively instructive, it requires to be done by those who possess two requisites: an eye familiar with the difference between natural and morbid appearances, and a mind capable of interpreting the hieroglyphic characters left by disease. These qualifications are never found except in those who are, or at least have been, for a considerable portion of their lives, employed in these examinations. A man, whose experience in morbid anatomy amounts to five or six examinations in the year, is neither a competent witness of appearances, nor a competent judge of their meaning."

In conclusion, my professional brethren will, no doubt, have gathered from these remarks, that I consider the depleting system to be pernicious in puerperal mania: that nothing warrants its adoption in any case; and that we are still in ignorance of the real cause of puerperal mania. Yet there appears some grounds for tracing it to an altered condition of the fluids dependent on or connected with (as cause and effect), a morbid condition of the uterus and its appendages consequent to or following the puerperal state. That the disease should also occur to the *nourrice*, does not, I apprehend, altogether refute this opinion. On this point, which some may be disposed to call theoretical, but which must be ever held of the greatest consequence, it will be readily understood why I say so little; nothing, in fact, is known respecting it. To these difficulties, therefore, I invite the attention of those whose position enables them to prosecute the inquiry. This ought to embrace a very careful examination during life of the condition of the fluids; and, after death, a rigorous inspection of the uterine system with its appendages. Nor should the nervous system be neglected, seeing that some distinguished men have asserted in regard to it what others have as positively denied.

In the absence of positive data there is always room for theory. Speculating, then, on the probable causes of puerperal mania, we may reasonably conjecture that, to a disordered condition of the uterine system, may be traced those influences which, acting on a debilitated and excited condition of the brain and spinal marrow, terminates by upsetting the reason.

As these organs recover their healthy condition, the morbid influences cease to act on the brain, which never was organically affected, and this all-important organ returns to its normal state. On no other hypothesis can we well explain the phenomena of this disease, unless we resort to another still requiring demonstration, viz., an altered condition of the fluids.

Both hypotheses may be true, the one not necessarily excluding the other. To functional disease, and not organic, must be traced most of the phenomena of puerperal mania, else frequent recoveries would be impossible. All that I have seen leads me strongly to condemn the depletory plan of treatment which, according to Dr. Gooch, did prevail until lately in this country. It is not easy to lay down, in general terms, details of treatment applicable to individual cases; such must be left to the judgment and discrimination of the practitioner. Nourishing diet, not stimulating; port wine and water as the ordinary drink, regulated by the state of the pulse and other symptoms; occasional attention given to the intestinal tube by the use of warm, stimulating purgatives; narcotics, antispasmodics, and tonics, ablactation, the careful removal of all causes of irritation,—these are the means most likely to conduce to the rapid recovery of the patient; and this statement I put forward, not on my own authority, but supported by the opinions of authors, in whose judgment every confidence may be placed. The practical man will naturally vary this plan of treatment according to circumstances; but still its essence must remain the same. Frequent removals have been found beneficial, perhaps even more so than in cases of mania arising from other causes.

But these matters belong rather to the moral treatment into the consideration of which it is not my intention to enter; on this point, therefore, I beg leave to refer to the more elaborate works on the treatment of the insane, amongst which the writings of M. Esquirol unquestionably hold the highest place. In my second memoir I shall consider the intimate nature of a still more formidable disease than the one I have just considered, depending also on the puerperal condition.

14, Keppel-street, Russell-square,
March 26, 1850.

DESULTORY SKETCHES.

By DR. BUSHNAN.

(Continued from page 255.)

MESMERISM.

A melancholy spectacle is presented on the publication of each succeeding Number of the *Zoist;* persons grave by years, by position in society, by education, by profession, vieing with one another which shall most outrage common sense. It makes the heart sick to see men who, by courtesy at least, are still deemed to be possessed of reason, guilty of so much folly. By unanswerable evidence, Mesmerism has been proved, again and again, to have little other foundation, in all its most striking features, but trickery and delusion. On many occasions, Mesmer himself was convicted of imposture. He set the example of that impudent trick which has so often been imitated by his followers, namely, a collusion with parties who pretend to have been cured. There is, in particular, one early memorable instance, in which he miscalculated his power of imposing on the public. It is not surprising that it required some experience to attain the necessary dexterity in this kind of deception. The less hazardous secret of getting people to counterfeit diseases which he might afterwards represent as cured, he did not at first understand. He was, in consequence, foolish enough to choose the case of a girl known to the public of Vienna to be blind, in the expectation that his assertion of a perfect cure, backed by the suborned testimony of the patient, would escape detection, and swell the roll of his dupes. This is the famous case of the Vienna musical girl, Mademoiselle Paradis, who was known to have been blind for a number of years. Apparently with her own consent, she was pronounced by Mesmer to be completely cured; and when a public exhibition was insisted on, he rested the proof of his success on her being able to name different colours presented to her in succession. At first she succeeded; but it being discovered that Mesmer, in the meantime, made private signals to her, she was rescued by her father from her thraldom, found to be as blind as ever, and wholly unable to distinguish colours. Public indignation obliged Mesmer to leave Vienna about 1778. After this he began his career at Paris, where he had the address to persuade a person of some note, namely Count de Gibelin, a man of letters and a *savant*, that he had been cured of a serious disease, and this gentleman was induced to put forth an appeal to the public on behalf of Mesmer's treatment. Shortly after, however, and while still undergoing a course of Magnetism, he was arrested by the fell serjeant, Death, who took the cure into his own hands. An ardent partisan of Mesmer, at Paris, was Monsieur Campan, a gentleman belonging to the Court. Being taken ill, he was removed to Mesmer's own house to be cured; and Madame Campan tells us, in her Memoirs, that this time, her husband having symptoms of pleurisy, was secretly bled and blistered by Mesmer, who notwithstanding received a certificate from the patient that he had been cured by magnetism. Madame Campan, on being questioned by their Majesties as to her husband's case, declared Mesmer to be a barefaced quack, adding the proof just mentioned, and henceforth he was discountenanced by the French Court. Among the other tricks which Mesmer practised at Paris, was the introduction of accomplices among his patients—perhaps the first "thimble-rig" on record. One of his juggles was to make his patients stand or sit in a circle, sometimes of two or three rows, around a wooden case or bucket (*baquet*) two feet high, in which were contained vessels of magnetised water. It was covered with a perforated lid, and each person in the circle was furnished with a polished iron rod, alternately long and short, which could be passed through one of the apertures into the bucket, while the other end was to be directed towards the supposed seat of the disease with which the patient was affected. There was also a cord, which seems to have been differently arranged at different times; sometimes being attached to the extremity of the rod next the bucket, and coiled about the affected part of the body, at other times being made to pass round the whole circle of patients, encircling once or oftener, the person of each; sometimes the whole company also joined hands. At first a mysterious silence reigned in the Hall, and the light was feeble; then, from time to time, from an adjacent chamber arose solemn sounds of music, vocal and instrumental—sudden changes being made on their character. Sighs and suppressed groans began to prevail; the patients often felt oppressed and parched with thirst, to allay which they were supplied with copious draughts of what is called Imperial, namely, cream of tartar water. After a time an excitement arose; the patients sought to embrace each other; rapid involuntary motions of the extremities and trunk occurred; hiccough, starting, immoderate laughter, piercing cries, wildness of the eyes were often added; and then followed langour, reverie, dejection, and drowsiness. At the beginning Mesmer did not appear; but he had secret confederates in the circle who directed and encouraged the necessary degree of excitement among the unfortunate dupes. When he did appear, it was in an imposing robe, and holding in his hand a rod, which he waved to and fro, while he frequently condescended to apply his hands to various parts of the person in particular patients, or else played with his fingers on the forehead or on the neck, at the same time that he fixed a steady gaze on the patient, who, by whatever cause, had earned his attention for the moment.

I will not say, "*ex uno disce omnes*," because it is very certain that many partisans of Mesmerism are sincere and conscientious believers in its powers, being themselves dupes; still more common, probably, it is, that, having first suffered themselves to be deceived, they become enthusiastically desirous to seduce others to the same idolatry. I do, however, affirm, that Mesmer was, beyond all doubt, an adventurer, who, like many other unprincipled men before and since his time, had no higher motive of action than the desire to render the easy credulity of a certain proportion of mankind the means of his own aggrandisement. With this settled purpose in his mind, he did not so much invent a system, as he ransacked the mystical writers who preceded him, to extract from them whatever might most forward his design. Whoever is acquainted with the writings of Paracelsus, Van Helmont, Wirdi, Maxwell, Kircher, and Santenelli, as well as with the several publications of Mesmer himself, must acknowledge how much he is indebted to such authorities for the ideas which he propagated.

It is true, that Mesmerism, as it exists at present, differs considerably from Mesmerism in the hands of Mesmer himself and his immediate followers, in the last century. I say in the last century, because, though Mesmer lived to the year 1815, he and his system fell into complete obscurity after the French Revolution broke out. The country of his refuge seems to have been Switzerland. Different, however, as are the views and practices of the present day, as compared with those of Mesmer and his immediate followers, it is not too much to assume, that the Mesmerists of our time—for example, of the *Zoist*—think "that he produced real effects, though he was ignorant of the cause." These are the words of Mesmer himself,—the words he employed in speaking of his predecessor, the Curé Gassner, a parish priest, near Coire, in Switzerland. Gassner, just before Mesmer rose to fame, created a sensation in Switzerland and Germany, by the reputation which he acquired for the cure of diseases of the same character as those in which Mesmerists chiefly boast their success. Gassner held, that human diseases in general result from the agency of the devil; and his method of cure consisted in a species of exorcism, in which, by the appalling use of the name of Christ, he threw his patients into violent convulsions, and produced other effects on weak people, not unlike those with which Mesmerists are familiar. The Bishop of his diocese dismissed him in the early part of his career, as employing exorcisms not sanctioned by the rules of the Popish Church; but, having attracted the attention and favour of some of the Bishop-Princes of Germany, he was restored to his parish. It was in consequence of the sensation produced by Gassner's alleged success, that the illustrious De Haen, then the Imperial Physician at Vienna, was led to publish his Inquiry into diseases said to be the result of "possession." But to return to the Mesmerism of our times; it should never be forgotten, that a system, the beginnings of which were raised with the unclean hands of fraud and deception, can hardly remain free in its superstructure from the taint of the like disgraceful instruments. If the same amount of deliberate imposture cannot be brought home to the Mesmerists of our time, it is not owing to there being a greater allowance of truth in their system, but because self-deception exists among the professors to a greater extent, and probably because the dupes being the very *élite* of human weakness, yield their belief without the trouble of much lying.

"How long, ye simple ones, will ye love simplicity!"

This subject will be continued next week.

7, Nottingham-place, Regent's-park.

HOSPITAL REPORTS.

ST. BARTHOLOMEW'S HOSPITAL.

STRANGULATED INGUINAL HERNIA—OPERATION.

Just as we were about leaving the hospital, on the 30th inst., a man was brought in labouring under symptoms of strangulated hernia. Taxis, with the usual addenda of warm-bath, &c., having been persevered in for a considerable time, without any effect being produced on the tumour, Mr. Lloyd determined to bring the man under the influence of chloroform, so as to relax the muscles to their fullest extent; and, if the hernia could not by this means be reduced, to operate without further delay, which would only serve to render the result of the operation more uncertain. The man, aged thirty-two, had first suffered from the hernia, in consequence of lifting a heavy weight seven years ago. During the period which has since elapsed, it has gradually increased

in size, not unfrequently descending, and causing him some difficulty in its return. He has, however, always succeeded in doing so, until the present occasion, by means of continued pressure and the use of sharp purgatives. These have now been resorted to by him, but without avail, since the hernia came down yesterday morning about nine o'clock. He had not been exerting himself, and does not know what caused its descent. The bowels have not been open for two days. He had some severe vomiting last night, the matters brought up were bilious, but not stercoraceous. The sickness has now quite gone; there is little, if any, anxiety of countenance; the tongue is clean and the pulse good. The hernia is on the right side of the scrotum, the size of a large hydrocele, to which, from its shape and elasticity, it has, at first sight, a close resemblance. Its history, its opacity, the position of the testicle at the lower part of the scrotum, and apparently unconnected with the swelling, the pain over the inguinal canal, the firm doughy feel of the upper part of the tumour, as well as other circumstances, of course contradicted this idea. The man does not suffer any pain, except when the upper part of it is handled. There is no tenderness or tympanites in the abdomen.

Mr. Lloyd, when the spasm usually attendant on the first stage of choloroform inhalation had passed off, again resorted to the taxis, but could produce no effect whatever on the hernia. The part was therefore shaved, and he commenced the operation by pinching up and dividing, for about three inches, the skin over the supposed situation of the stricture, the other coverings, the sac excepted, being next cut through, the director was carefully introduced and several tendinous bands were divided, as well as the tendon pressing on the neck of the sac, but the hernia could not be reduced, though the finger passed readily through the ring. The sac was therefore laid open, when several ounces of dark coloured serum flowed out and showed a loop of intestine, the coats of which were congested with serum and blood, and so thickened as to render their return into the cavity of the abdomen impossible without free division of the neck of the sac, which was done on the director, and the bowel pressed up. The wound was closed with sutures, strapping, and a pad, and the patient taken to his ward.

The treatment resorted to in this case, which is justly recommended as a last resource, only to be used when other less dangerous proceedings have proved of no avail, was shown by the condition of the part, as seen during the operation, to be fully warranted as the only means of setting free the incarcerated intestine. Taxis could be of little avail, as the mouth of the sac was completely plugged up by the swollen intestine, preventing the return of the quantity of effused serum, which, rendering the sac tense, interfered with proper pressure on the bowel. And even had the fluid not been present, it would have been impossible to force back the gut, so greatly distended as its coats were, and consequently requiring to have the passage through which it descended very freely enlarged. The position of the testicle, at the lower part of the tumour, and apparently unconnected with it, formed a satisfactory diagnostic mark, were others wanting, between this complaint and hydrocele, which it simulated.

EXCISION OF THE SHOULDER JOINT.

The practice of excising joints, first mentioned by Paulus Ægineta, and performed but a few times during the end of the last century by Charles White and others has of late become a comparatively common operation, and not unfrequently has been the means of saving a useful limb, which must otherwise have been amputated. Upon the success of such means, which, removing the disease, leave the part of the body maimed in the least possible degree, the scientific Surgeon looks with great interest, as well for his own credit and satisfaction, as for the benefit of the patient placed under his care. The results of such operations, both as regards the subsequent condition of the limb and the danger to the patient's life, have been such as to justify the eulogiums of their warmest supporters. We shall, on the present occasion, give an account of an operation of this sort well performed by Mr. Stanley, at Bartholomew's Hospital on Saturday last, together with those points in the patient's history which will serve to show the nature and cause of the disease.

Mr. Stanley commenced the removal of the head of the right humerus by making the V shaped flap recommended by Sabatier; the knife being introduced over the coracoid process was carried around the deltoid muscle up its posterior border. The flap was then dissected up by cutting through the tissues, close to the bone, with the capsular ligament, thus at once laying open the joint. While an assistant held this back, the bone was rotated alternately inwards and outwards, in order that the muscles inserted into its head might be more readily divided. When the arm was carried inwards for the purpose of everting the head of the humerus, that the saw might be more readily applied, the shaft broke about three inches from its upper extremity. The operation was, however, proceeded with, and the head of the bone sawn off, two flat pieces of metal being placed between it and the soft tissues, to protect them from injury. One vessel was tied; the exposed surface well sponged, to remove the clots; the flaps secured with the interrupted suture, and water-dressing applied. A pad, covered with oil silk, was placed in the axilla and underneath the upper arm, so as to throw the bone well out into its natural position, and the fore-arm and hand secured at right angles with the body across the chest. Chloroform was, as usual, exhibited.

Mr. Stanley, at the close of the operation, gave the following history of the case. The man had been in the Hospital between five and six months, and under treatment for inflammation of the shoulder-joint. This was brought on by an accident which he had four months previous to his admission, while carrying a heavy load on his back. He states that it slipped, and, losing his hold, he threw the arm violently over his shoulder to prevent the parcel falling, when he found that it became almost powerless. On the following day it became painful and much swollen, and he had not regained any use in it up to the present period. For a considerable time past it had been evident that there was relaxation of the cartilage on the head of the humerus, and that the tissues around were much affected, numerous abscesses having formed in and around the joint, from which the matter was discharged by several sinuous openings. The probe had been carefully introduced into all these, but no carious or denuded bone could be detected. No grating was felt between the head of the humerus and glenoid cavity when their surfaces were pressed and rubbed together, probably from the deposit of abnormal tissues in the joint during the progress of the disease, by means of which the articular surfaces were kept separate. The arm being perfectly useless with this condition of the parts, and the patient's health having suffered greatly from the severity of the disease, it became necessary that some means of relief should be adopted. It was a question whether the amputation or excision of the joint should be resorted to. From the favourable experience, though it is still but small, which surgeons have had of the success attendant upon the latter operation, and the great advantage that it has over so serious a mutilation as the entire removal of the limb, Mr. Stanley determined to resort to it, thinking it a favourable case. Those present had seen that the chief steps of the operation had been gone through without difficulty, but that when the arm was carried inwards the bone broke about an inch and a half below the point at which the saw was subsequently applied. This fragility rendered it probable that the bone was more extensively diseased than anticipated. The excised portion, before closing the wound, was, therefore, sawn through, and carefully examined. The saw passed through it not more easily than is usual in cancellated structure; and the tissue of the bone, with the exception of increased vascularity, and its ulcerated articular surface, appeared healthy. Mr. Stanley considered that the fragility was dependent upon an imperfect deposit of animal matter, the consequence of the inaction of the limb for so long a period, for bones, as well as other tissues, have their nutrition impaired by such a cause. When the wound healed and the limb was brought into active exercise, the bone would again become firm and healthy as before.

In the periosteum covering part of the removed portion of bone was an incipient ossific deposit which adhered firmly to the humerus as the outer surface of the periosteum did to the surrounding tissues, rendering it difficult to drag the divided portion away. When this was done the thickened periosteum was left behind. The flap made by Mr. Stanley served thoroughly to expose the joint, and seemed more adapted, at least to this case, than Mr. Syme's straight incision, which is used by many. The bleeding, as usual in these cases, was very slight; the subclavian artery was not compressed during the operation.

CANCER OF LIP.

Mr. Lawrence afterwards removed, by an elliptical incision, a cancer from the lower lip of a man between fifty and sixty. It had commenced on the right side. The man was in the habit of smoking.

KING'S COLLEGE HOSPITAL.

ABSCESS IN THE THIGH CONNECTED WITH THE BOWEL, AND SIMULATING OBTURATOR HERNIA.

(Continued from page 237.)

Nov. 17.—The bowels were freely opened last evening after the injection. During the night he had two rather severe attacks of vomiting; the matter brought up having a bilious tinge. He complains much of griping and a sense of constriction in the abdomen, as well as of pain and tenderness in the groin. The tongue is coated with a thick white fur. Appetite is bad. Pulse frequent.

19th.—The swelling, which could only be discovered three days ago, is evidently increasing. It is a smooth, tense, elastic elevation, apparently situated beneath the fascia and adductor muscles. It is very tender to the touch, or when he moves it, and on its surface there are a few enlarged glands. He complains of weakness, want of sleep, and inability to take food. Has had no return of the vomiting since the night of the 16th. The bowels are freely open, and the abdomen is less tumid than it has been for some days past. The griping and sense of constriction are gone. Tongue very foul. He passes a normal quantity of urine.

Dec. 1st.—The swelling in the groin has increased, and extends lower down the thigh; it is softer and less painful. He complains of pain and soreness about the nates and back, which probably arises from the position in which he lies. He sleeps badly; has no appetite; the bowels act regularly; and he micturates freely. To have a draught containing nitric acid and bark three times a day. Amadon plaster to the back.

8th.—He complains of continual pain along the inside of the thigh, which at night is severe, but it abates during the day. His appetite has improved somewhat while taking the medicine, and he sleeps better. The bowels continue open. The pulse is firmer and less frequent.

20th.—The tenderness of the tumour is considerably less; but the pain on the inside of the thigh and knee-joint is frequently very severe. The swelling may be lessened by pressure, a gurgling noise being at the same time heard. This has been perceptible during the last fortnight. The urine is high-coloured and rather scanty, depositing a flocculent sediment of lithates and mucus, with a purple film on the vessel.

26th.—He is looking better and more lively, but complains of pain at the back of the thigh, where there is a little redness, and on pressure it seems to be indurated and œdematous. The tumour on the anterior part of the thigh still increases; it is painful and throbbing at night, and it is more elastic and distinctly tympanitic. It may, as before, be lessened by pressure, but this causes the patient much pain. There is no perceptible impulse on coughing, though this is plainly felt in both abdominal rings. Mr. Fergusson yesterday made an examination per rectum, but could discover no tumour in the pelvis. Bowels are open, tongue clean, appetite improved.

Jan 5th.—The œdema and tenderness on pressure are extending further down the thigh. Pressing on the abdomen with one hand, while the other rests on the swelling, it becomes very appreciably more distended, but it is doubtful whether the contents

come under Poupart's ligament, or through the thyroid foramen. It is pyramidal, with its base to the pubes, and more superficial than hitherto. To have a spica bandage and pad, and also some linctus for his cough, which is troublesome.

17th.—The bandage at first afforded him support and ease, but being subsequently more tightly applied, it caused him uneasiness, and he refuses to wear it any longer. There has been some feverishness about him, owing to the bowels being constipated. This has now passed off. Mr. Fergusson, at his visit to-day, made an exploring puncture into the tumour with a trocar and canula, when several ounces of thin yellow pus, with much fetid gas, issued out. Its flow was increased by compressing the tumour, but not by pressure on the abdomen.

22nd.—No discharge has taken place since the day on which the puncture was made, the opening closing directly. He is becoming thinner and weaker, but his other symptoms remain the same. The abscess having refilled, Mr. Fergusson deemed it advisable to open it, which was done by freely dividing the integuments with the superficial fascia, thus exposing the fascia lata, which appeared thin, and not unlike the sac of a hernia, but on its being carefully raised and cut through on a director, the adductor longus muscle was discovered beneath it. On dividing this muscle the sac of the abscess was seen and punctured, when a large quantity of pus escaped with a thin serous fluid, having a horribly fetid sulphuretted hydrogen smell. On introducing the finger into the opening it passed deeply; no communication with the abdomen could be traced under Poupart's ligament, but there existed a small opening in the situation of the obturator foramen just admitting the point of the finger. To be poulticed with linseed meal.

24th.—Does not complain of pain. The discharge from the wound is copious, and its smell is very offensive, evidently fæcal. The bowels have not been open since the operation. He has lost his appetite, and feels extremely weak, and much annoyed with the smell. To be poulticed with charcoal.

29th.—The discharge has been fæcal during the last three days, and the bowels have been constipated until this morning, when an injection was administered, none of which came through the wound, and brought away a small quantity of fæcal matter. He suffers no pain, but is becoming much weaker and scarcely able to take his beef-tea. Dr. Todd, who saw him to-day, ordered eight ounces of brandy and a grain of opium three times a day, to allay the great irritability under which he is labouring, as well as to procure sleep.

31st.—Is evidently getting worse, being very restless, irritable, and sleepless; his face is thinner, the features sharpened; pulse weak and irregular; no evacuation by the rectum. To continue the same medicines.

Feb. 7th.—The patient has remained in much the same state since last report, with a constant fæcal discharge from the opening in the thigh, which is surrounded by a very painful and inflamed margin, and the adjoining skin is excoriated by the discharges. To resume the pills, which have been discontinued, and continue the other things as before. From this time he gradually sank, apparently exhausted by the discharge, and died on the 14th.

Post-mortem.—The examination after death revealed, as was anticipated, an abscess connected with the intestine, the lower end of the jejunum, which was attached, by adhesive inflammation, at rather an acute angle, to the peritonæum lining the left obturator region of the pelvis. The gut communicated with an abscess lying beneath the peritonæum, and passing externally by two routes, the one, through the obturator foramen, with the artery and nerve; the other, through the upper part of the great sacrasciatic notch. These tracts coalesced in front of the thigh, forming a large bag in the side of the obturator externes, and closely embracing the capsule of the hip-joint, which was found to be quite healthy. The abscess was covered by the abductors and pectinous muscles. Some distance below the opening in the bowel the folds of the ileum were found matted together by adhesive lymph, as if they had been crowded together in a hernia. In the inguinal canal, on the same side, was a hernial sac of considerable size. The cœcum was distended with flatus, and contained some scybalæ of a light colour. The transverse and descending colon were empty, and much contracted, the latter being united to the mass of ileum before mentioned. The preparation was sent to the Museum of King's College.

This man, as seen from the above account, had all the diagnostic symptoms of obturator hernia which are mentioned by Chelius, superadded to which were some of those of strangulation; the former were, the seat of the swelling at the upper and inner part of the thigh, its peculiarly elastic tension, its origin, its lessening on pressure, its gurgling, and the gastric symptoms usually accompanying ruptures. It was only as the case advanced that any very satisfactory decision could be arrived at as to the probable nature of the swelling.

CENTRAL LONDON OPHTHALMIC HOSPITAL.

Operations by Mr. HAYNES WALTON.

ECTROPIUM OF THE LOWER LID OF THE RIGHT EYE FROM CARIES OF THE MALAR BONE.

The patient was a healthy-looking child, aged four. Several months had passed since the ulceration had healed. The outer half of the lid was completely everted by the contraction of the cicatrix, which was very hard, and firmly adherent to the edge of the malar bone, below the outer and lower angle of the orbit.

Under chloroform, the cicatrix was removed by a horizontal elliptical incision, the ends of which were afterwards elongated, in order that, by a proper dissection, the lid should be released, and the surrounding skin freely separated from its attachments. The wound was brought together by three sutures. The tension of the skin was removed, and the lid nearly righted. A fold of conjunctiva, from that part of the palpebral sinus opposite the eversion, was raised and cut off.

Mr. Walton said, that he had been induced to attempt amelioration in this case by transposing the skin, for which purpose he had made a dissection, which perhaps appeared extensive, considering the object in view; but to have loosened merely the edges of the divided skin, or to have dissected less liberally, would have been of no avail; in fact, worse than useless. Could he have chosen the direction of the incision, it should have been vertical, because the borrowed skin could have been more securely maintained in its new position, and there would have been less draught or strain on the lid from its elasticity. Being well aware of the little benefit that usually attends operations to remedy peculiar conditions arising from contractions consequent on the loss of skin and its subjacent tissue, unless new skin can be introduced, he had adopted the present plan of operating, because the contraction was limited, the loss of structure slight, and the cicatrix at a greater distance from the edges of the lid than usual, by which the transposition would tell better. Had there been ectropium of the entire lid, he should have transplanted a bit of skin from the temple. He had just seen a good lower lid that had been made in that way by his friend Mr. Lloyd, of Bedford-row. The natural lid was lost from ulceration.

In this case, the lid would have been perfectly restored at once, had it not been for the twist that the cartilage had acquired; but he doubted not that, after the orbicular muscle had been brought to act, and the conjunctiva had cicatrized and contracted, it would be quite restored. It was requisite to operate on those cases early, before the cartilage was permanently bent, and the exposed conjunctiva had become cuticular.

ARTIFICIAL PUPIL BY SEPARATION.

This patient, aged 26, had been a soldier, and was discharged for blindness. He had been in the Military Hospital for nine months previous with eye disease, but could not give any clear idea of the nature of the affection. He had been repeatedly bled, and the eyes cauterized daily, either with lunar caustic, or a very strong solution of that substance. The left eye was quite disorganized; the right softer than natural, a little atrophied, the cornea reduced, and opaque at the middle and outer portion, and hazy in the other part; the iris much discoloured and bulging, and nearly touching the cornea in every part. The pupil, contracted and closed by lymph.

Without chloroform, the cornea was punctured about its centre with a broad needle, a hook introduced, the iris seized on the inner side, close to its circumference, and separation attempted, but the hook tore away without affecting any disconnexion from the ciliary apparatus. A second trial was made, but ineffectually. The hook was then laid aside, and a pair of forceps that Mr. Walton has lately introduced into practice for the removal of capsule, and which are delineated in his published lectures on operative ophthalmic surgery, were used; the iris was easily caught at its margin and a sufficient portion detached, withdrawn, and strangulated in the wound in the cornea.

Mr. Walton remarked, that without such an instrument he had not any means at his disposal for making a pupil by separation, in a case with such peculiarities. The rottenness of the iris rendered a hook inapplicable, and any sort of forceps of the ordinary make could not have been used through the small aperture to which he was restricted, owing to the fluidity of the vitreous humour and the danger of its escaping through a larger one; fortunately not any of it was lost during the operation. Several months ago he had endeavoured to make a pupil in the same eye by dividing the iris, and although little inflammation had followed, the cut portions either fell together and united, or the aperture was closed by lymph, both of which were the common causes of failure in diseased irides. It was a discouraging case, and but for the sensibility of the retina, which is the great criterion of the propriety of operating in all cases requiring a new pupil, he would not have interfered. Previous to the first operation he rather suspected that the lens had degenerated, and been absorbed, and he tried whether information respecting its presence could be gained by any resistance that it might offer to the passage of a needle; for unless the iris falls backwards, which is the position it takes in a healthy eye when the lens is lost, there is no other appearance when the pupil is closed that will enable a correct opinion to be formed of its absence. The history of the case may be some guide. Mr. Tyrrell, when on the subject of "drilling," says, that as long as much of the lens remains, the operator may feel resistance to the point of the instrument. He had pointed out at length, on a past occasion, that such a means as a test could not be relied on,—it was not a practical one, or at most, if it were, instances of its application must be few; if the lens were hard, most probably resistance could be felt, but then the lens is never hard in early life, and when late in life an eye has been so much damaged as that of this soldier's was, the lens would almost to a certainty degenerate, and become soft. For aught that he could feel of resistance offered to the needle, although he proceeded with great delicacy, he should have said that the lens had been absorbed, yet, in dividing the iris, no inconsiderable amount of soft lenticular matter escaped.

Several other interesting operations were performed, which we propose to notice shortly. Mr. Walton has been operating on entropium in a manner different to what we have heretofore seen. He stated it to be his intention to communicate his method, with remarks thereon, to one of the Medical Societies.

PROGRESS OF MEDICAL SCIENCE.

FRANCE.

[Paris Correspondence.]

CHLOROFORM IN AGUE.

This powerful agent will soon have made the round of human maladies, unless, indeed, the experimental rage be arrested by the accounts of untoward accidents which reach us from all sides.

At the last meeting of the Academy of Medicine, M. Delioux, Professor at the Naval School at Rochefort, presented a memoir on the febrifuge pro-

perties of chloroform. With this remedy he has succeeded in curing many obstinate cases of ague which had resisted quinine, iron, and other tonics. In many other cases, however, the accesses were only suspended for a short time, and the ague returned. M. Delioux administers the chloroform in a syrup containing one grain to the scruple of common syrup. He has never observed its internal administration produce any bad effects.

TREATMENT AND CURE OF DIABETES.

Notwithstanding the immense labours bestowed by some of our best Physicians and most talented chemists, on the nature and treatment of diabetes, these important points are still involved in much obscurity, and many Practitioners of the present day still adhere to the prognosis long since given by Prout and Rayer, viz., that diabetes is almost always a fatal disease. Few have studied this complaint, both at the bed-side and in the laboratory, with greater assiduity than M. Bouchardat; and his labours have not been fruitless; for he announced, at the last meeting of the Academy, as the result of extensive practice, that the method of treatment founded on his researches, leads to the cure of diabetes in a majority of cases. It may, therefore, be interesting to notice briefly the successive steps of experiment and investigation which have led M. Bouchardat to this splendid result.

In one of his early Memoirs M. Bouchardat determined experimentally that the *thirst* of patients affected with diabetes is directly proportionate to the quantity of saccharine, or starchy matter, contained in their food; and that the quantity of sugar in their urine bears a constant proportion to the quantity of the same principles in the food. M. Bouchardat likewise set at rest the controverted question of the presence of sugar in the blood of diabetic patients, and showed how the sugar may be found in the blood a few hours after a meal, whereas it has disappeared from the circulation many hours later. This proves that the kidney merely acts as an organ of elimination; during diabetes it eliminates sugar instead of urea. In simple diabetes, a particular matter also is eliminated; but not sugar. It is a mixture of glucose, urea, and certain salts.

Having shown that the sugar of diabetes is formed neither in the kidneys nor stomach, M. Bouchardat adduces various reasons which lead him to attribute the elaboration of this principle to the liver; and the primary cause of the disease to disturbance of the nervous system. This latter opinion derives some support from the well-known experiments of M. Bernard, who produces diabetes in animals by wounding a particular part of the brain.

Although the practice of Rollo was, undoubtedly, an immense improvement in the treatment of diabetes, further experience demonstrated that the exclusive use of animal food was not sufficient to prevent the formation of sugar. M. Bouchardat therefore proposed the gluten bread; and this, together with the carbonate of ammonia, forms the basis of his treatment. All substances containing starch or sugar, are, of course, forbidden; but M. Bouchardat replaces them by other substances of the same physiological class, as alcoholic drinks and fatty matters.

The best mode of combatting the functional derangement of the liver, which, according to the Author's views, is intimately connected with diabetes, consists in the use of purgatives. M. Bouchardat employs them in extraordinary variety, from white mustard-seed to the pills of Belloste, and the remedy of Durande.

In some cases of diabetes, however, the most careful attention to diet and the state of the liver fails to relieve the complaint. Here some serious disturbance of the nervous system is to be suspected. Indeed, it often manifests itself by general excitement, numbness of the limbs, partial amaurosis, or severe pain in the lower part of the spinal vertebræ. These desperate cases the Author does not abandon, but endeavours to act on the nervous system, and sometimes with success, through means of those substances which act most powerfully on the nervous centres, as belladonna, strychnine, opium, and the solaneæ.

M. Bouchardat has now treated forty-one cases of diabetes by his improved method, and saved more than one-half of the patients. This is the best eulogium that can be passed on his practice.

SUGAR IN THE SERUM OF A BLISTER.

While on this subject I may mention that M. Wurtz has demonstrated the presence of sugar in the serum from a blister which had been applied to a diabetic patient. The case occurred a short time since at La Charité, in the wards of M. Rayer. No trace of sugar could be found in the sputa of the same patient.

ROTATORY CONVULSIONS IN A CHILD.

There is now a most extraordinary case of this kind at the Enfans Malades. The subject is a boy thirteen years of age, who does not appear to labour under any disease whatever; at least, all the functions remain perfectly normal in the interval of the attacks. These come on suddenly, while the child is playing. On a sudden he becomes dull, sits down in a corner, makes a few incoherent signs, and then falls on the ground. The limbs now become violently contracted, and the jaws closed; but there are no convulsive movements of the eyes or face. This state may continue for a quarter of an hour, the child being apparently unconscious, when suddenly the diaphragm contracts spasmodically once or twice, and the child begins to roll from one end of the ward to the other with inconceivable rapidity. The motion is exactly like that of your citizens diverting themselves down Greenwich hill. In two or three minutes this strange convulsion ceases; and either the child recovers, or is attacked by a fresh convulsion in a few minutes more.

The attacks are frequent, often five or six during the day, and sometimes a single access is prolonged, with very short intervals, for three quarters of an hour. The Physicians at the Hospital do not know what to make of this curious case. In the olden time the little patient would assuredly have been said to be possessed.

LARYNGISMUS STRIDULUS.

Apropos of children's diseases I may mention, that a physician here, who has had some little experience in that line, has employed the extract of Indian hemp with great effect in a very severe and obstinate case of spasm of the glottis. The disease occurred in an infant nine months old, who had been sadly neglected and ill-treated while at nurse. She was spoon-fed, and presented no trace of teething. The bowels appeared to be in good order, and the stools were natural, although the appetite was voracious. It was impossible to ascertain how long the infant had laboured under the disease. The nurse, however, said, that whenever the child had its "little convulsions," she used to purge it off with a decoction of sorrel—a most villanous compound—and under desperate crises, used to have her touched by an old hag in the neighbourhood, who personified the Virgin Mary. Neither drug nor divinity produced any effect, and, when the infant arrived at home, she was in a most wretched state of emaciation, evidently from mere inanition. A wet nurse was ordered at once, but the child refused to take the breast. Gentle laxatives, or rather gentle purging with castor oil, was next tried, and the food restricted to milk, with chicken-broth twice a day. The number and violence of the fits were thus diminished; yet, in spite of the greatest attention to the bowels and diet, a fit of great violence would occur every now and then, threatening suffocation. Indeed asphyxia did occur once; respiration had ceased; the mother had laid down her child as dead; and death would have inevitably occurred, had not the Medical attendant been fortunately on the spot, and the chicken-broth, as fortunately, boiling on the fire. In the agitation of the moment the hot broth was applied to the child's legs; the pain was felt; a slight twitch of the facial muscles showed that sensibility still remained; in a second or two a very faint effort at breathing was made, and respiration was established at last, though very slowly. Various antispasmodics having been employed without any manifest result, it was now resolved to try the Indian hemp. Half a drop of the tincture, with two drops of essence of mint, was given at night. The child slept nearly the whole night, and had only two fits. On the following day the dose was increased to one drop, and on the next day to four drops. The latter was administered in orange-flower water, and followed by a brisk dose of castor-oil. This had the effect of arresting the fits altogether; and since then, although the disease has not disappeared altogether, it has been completely under control, being now nothing more than a slight crow. It is worthy of remark, that fifteen to twenty drops of the same tincture are enough to throw this infant's mother into a state of delirium within five minutes.

SCOTLAND.

[Edinburgh Correspondence.]

SUICIDE BY PERFORATING AN ANEURISM WITH A CORKSCREW.

At the ordinary meeting of our Medico-Chirurgical Society, on the 6th of March, Professor Miller, read an account of a case of inguinal aneurism, in which, as formerly announced in the *Medical Times*, the patient destroyed himself by perforating the aneurism with a corkscrew. The man was about sixty years of age, robust and florid; he had been a soldier, and had since led a wandering, irregular life. Three years ago he received a kick in the groin, from which date the swelling commenced. Six months before his admission into the Edinburgh Infirmary he had been in the Glasgow Infirmary, where he had refused to submit to operation. In the interval he had lived much more irregularly and intemperately than before, and had used greater exertions in walking, the consequence of which was that his health had become much impaired, and the symptoms of the local disease had undergone a great aggravation. On the day after his admission into the Infirmary, a state of fever arose, with increase of the local symptoms. Some days after blood was drawn from the arm, to the extent of 17 ounces. Shortly after his health was found to be much improved, and, in compliance with his urgent request, an early day was fixed for the operation. In the night, however, following this announcement to the patient, he was found frantically dashing a medicine bottle against his head, and before he was discovered had inflicted two or three wounds in the temple, by which he lost from eight to ten ounces of blood. His head was bound up, and everything, as was believed, removed from beyond his reach with which he could hurt himself. In about two hours after, however, the patient in the next bed heard liquid trickling from this man's bed to the floor, and, the nurse being called, it was found to be a stream of blood. When Dr. Thomson, the clerk in charge, was summoned, who was still up to watch the result, he saw a stream of blood issuing from the tumour as large as the stream discharged from a full-sized catheter in emptying the bladder. On placing his finger on the aperture, no further loss of blood took place. After being faint for a while, the patient became violent, and severely bit another clerk, Dr. Keith, who was leaning over him. Although no more blood was lost in his struggles, he quickly became faint again, and did not recover, death taking place about three-quarters of an hour after the discovery of the bleeding. A pocket corkscrew was found in the bed; it belonged to himself, and he had contrived to secrete it at the time his clothes were searched. Dissection showed a considerable aneurism springing from the common femoral. All the arteries in the body were found much diseased, and there was an aneurism of the aorta, commencing immediately below the origin of the left subclavian, and extending for some inches downwards. The other organs of the body were in general free from disease. It was fortunate the operation was not performed, and Mr. Miller truly says, "Reviewing all the circumstances of the case, a conviction is forced upon one, that the suicide only anticipated by a few days the inevitably fatal result."

HÆMORRHAGE FROM UTERINE POLYPUS.

Dr. Patrick Brown, of Whitchurch, Salop, next gave an account of a case, in which the passage of a uterine polypus caused extreme hæmorrhage. There had been some bloody discharge from the vagina for a few days before Dr. Brown was sent for; while on that day it had become so profuse, that, on his arrival, he found the patient anemic and almost pulseless, her extremities cold, and her face bedewed with cold, clammy sweat. She was still

sensible, and could articulate in a feeble whisper. The bed was saturated with blood. The os and cervix uteri were found dilated with a round, firm substance of the size of a pullet's egg. Its uterine attachment could not be reached with the finger; but, by twisting the whole mass round and round, Dr. Brown succeeded in bringing it away. It proved to be a spear-shaped fibrous polypus, which had been suspended by a narrow pedicle. By the use of appropriate means the patient began to rally, and ultimately recovered. The Author concluded, by expressing his sense of the practical value of Professor Simpson's recent essay on Uterine Polypi, and lamenting that mistaken feelings of delicacy on the part of patients and their friends often prevented the general Practitioner from obtaining a vaginal examination. Dr. Simpson remarked, that the source of difficulty was asking the patient's consent before hand, instead of proceeding at once to make the examination. Some conversation then followed as to the quantity of blood which might be lost without a fatal event. In reply to a question by Dr. W. T. Gairdner, Dr. Simpson said, that in certain cases of profuse hæmorrhage lasting for months, he believed that the blood proceeded, not from any laceration, but from the mucous surface of the tumour. If, as some authors asserted, the bleeding took place from the mucous surface of the uterus, why should hæmorrhage cease when the polypus was tied?

Dr. John Gairdner then read an account of

A PECULIAR DISEASE OF THE NASAL FOSSA.

The patient was a Medical man. The first symptoms were those of a common coryza. After considerable exposure to cold, feverishness and headache were added, and the coryza itself became much aggravated, and was now, for the first time, attended with a fetid odour. The fetor proceeded exclusively from the right nostril. After a short time the acute symptoms subsided; but, for several years, he suffered from a constant sense of partial obstruction in the right nostril, an unsual discharge from that nostril, increased by an inclination of the head forward, an occasional fetor, which accompanied the discharge of a pellet of matter thicker than the ordinary secretion, and a dull pain in the right superior maxillary bone. The matter discharged from the right nostril exhibited pus-globules when subjected to the microscope. All the symptoms, and especially the fetor, were much aggravated by every inflammatory cold. After a lapse of seven years and a half from the first attack, he was seized with an acute catarrhal affection, and, when this subsided, he found himself nearly relieved from the symptoms under which he had suffered so much, and, ere long, the cure was complete. Dr. Gairdner conjectures, that the original inflammatory attack had caused the death of a part of the spongy bone, and that the tardy exfoliation of the diseased portion at last put an end to the disease. The patient was never affected with syphilis; but it appeared that two members of his family had suffered from a similar affection. Dr. Gairdner concluded by remarking, that such cases were usually described as oyrena, and represented as incurable; but that he had no doubt that many of them, when watched throughout their whole progress, would turn out to be merely tedious.

Professor Simpson then gave an account of some

INFLAMMATORY ERUPTIONS OF THE CERVIX UTERI,

which he had found on its surface and the inner extremity of the vagina were subject. Among these he had observed eruptions referrible to the vesicular, the pustular, the tubercular, and erythematic orders of the classification of Willan and Bateman. Herpes uterinus he had seen in patients who had been previously under treatment for common ulceration of the cervix, and he suggested, that this and other eruptions might be occasionally the origin and basis of the common variety of granular cervical ulcer. Acne, in the form of chronic hard tubercles and pustules, was by no means uncommon, and often coexisted with common ulceration. A papular eruption, sometimes having the characters of lichen, sometimes of prurigo, occasionally supervened in cases of chronic uterine disease. Ecyema and patches of aphthæ also occurred. Among the remedies mentioned were the nitrate of silver, medicated washes and medicated pessaries, and, in prurigo of these parts, brushing the surface with hydrocyanic acid, of the strength directed in the Edinburgh Pharmacopœia.

At the Pathological meeting of the Society, on March 20th, Dr. W. T. Gairdner exhibited various preparations illustrative of the

FORMS OF EXCAVATION IN THE LUNGS,

with a view to the all-important question, as to the curability of phthisis. An interesting conversation ensued, in which the same ground was gone over as on former occasions when the same subject was before the Society.

Afterwards, Dr. Douglas Maclagan exhibited three stomachs, taken from persons who had been cut off by arsenic, the three cases being respectively the result of accident, suicide, and murder. The chief point to be remarked in these stomachs was the antiseptic power of the poison, the two stomachs which had been subjected to a large quantity of the poison being in a complete state of preservation, while that which was but slightly affected by the arsenic was in an advanced state of decomposition.

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THE MEDICAL TIMES.

SATURDAY, APRIL 13, 1850.

We are apt—true, it may be an error on our part—to fancy that the public have not very well-defined ideas on the respective functions of the physician and surgeon. To illustrate this position, we think we need go no further than to the credence, almost unlimited, that is placed in quacks, and the prevalent notion that individuals may be gifted naturally with an intuitive instinct for the detection and treatment of disease, independent of all knowledge of the structure and organization of the human frame. That this delusion will ultimately vanish from the public mind we have every hope. We feel confidence in the advancing state of science generally, and especially in those most useful of all societies—the Mechanics Institutions,—as constituting grand nuclei for the diffusion of a correct knowledge of nature among the busy tribe of men—a great corrective of vulgar error and prejudice. Would that heaven would grant as fair a mean and method to open the eyes of the middle, and so-called upper classes of society, to the equally false and erroneous notions that veil their ideas of men and things! As, then, the knowledge of the laws of nature, but more especially those which affect the living body, become more generally known, we have no reason for disbelieving that the public, *en masse*, will throw off the whole body of quacks, and accept the regularly educated and scientific Physician as the true expounder of the aberrations of the functions of the animal body, and the sole authority on whose faithful interpretation of the laws of nature individuals can with confidence and safety repose.

But the knowledge thus acquired will teach him that there can be no such being as a pure Physician, no such automaton as a pure Surgeon. He will perceive, at once, that the more perfect and more complete the knowledge of the animal economy, the more satisfactorily will that knowledge determine the practice of the attending Medical man; and, although even he err and fail, it is but part and parcel of the common fate which is apt to befall all that is human. He will, however, at once perceive, and be thoroughly convinced of the great fact, that, whatever may be the nature or degree of these errors, they are as nothing compared in the balance with those inflicted on Society by the stupidity and ignorant assurance, of those who are absolutely unacquainted with the most common theorems in the economy of human physiology.

If we look closely and narrowly into the matter of Medical legislation, and judge of it by that standard,—not the antiquated one of preceding centuries, when the barber and the surgeon fraternised and mutually exercised the mysteries of their united crafts—which the enlightened state of the Profession, on the one hand, begins to feel is indispensable, and the scrutinising eye of the awakened Public deems no less imperative, it will not be for an instant that that public will suspend its judgment, in demanding, in the person of every medical individual, authorised to act as such, a thorough knowledge of all the contingencies to which the body of man is liable, whether he may fancy to select only one particular diseased state of that body for treatment, or may, like some of the best and most judicious of our Medical men, throw his lot on all the chances that the hazards of humanity may cast in his way.

In that which we have now advanced, in all good faith, we would beg to be understood as speaking of systems, not of individuals; and though the time is, unquestionably, ripe for a change in the great system of our medical organization, adapted to the exigencies of society as at present constituted, and suitable to the highly advanced state of medical knowledge in this country, we perceive most clearly the importance of the utmost degree of caution in the steps that may be urged.

The position and function—for we conceive these terms not in any way inappropriate—of the English College of Physicians are distinct and defined, as the supreme authority in matters relating to the practice of Medicine, and such other subordinate objects as it has received authority by its Charter to superintend and direct. But its portals are not open to the Profession at large, neither does its jurisdiction extend beyond the seventh mile-stone from its dusty walls; while the name of the Practitioners who live in open defiance and disregard of its statutes, even under the shadow of its gloomy Halls, is Legion. To be useful as a portion of the great body politic, or to protect the interests of its Fellows and Licentiates, its statutes should have all the valid force of legal enactments, and not go to rust and moth in the archives of the College. Honourably associated with that College are to be found some of the most illustrious names in Science; and, although we are so far modern as to feel disposed to estimate public corporations more by

the efficacy of their public measures than by the prestige of a name, sorry should we feel—and we dare to say that not a few of those who are now most bitter and active in their charges against the College would participate in our regrets—were the Hall in Pall-mall broken up, and "*Troja fuit*" inscribed on its dilapidated portals. The fabric of centuries must not fall by a ruthless hand. The accumulated store of ages cannot be scattered as by a spell. Better by far infuse into it some of the new blood, the fresh spirit of the moderns, and renovate its languid frame, to make it the guide of our Medical Legislature, the palladium of our Medical freedom. Into such it may yet be fashioned; but the moulding anew must be done with severe caution and grave deliberation. The subject, however, rises in importance as we discuss it; and, feeling it no light matter that we agitate, we content ourselves, for the present, with the few slight hints we have thrown out, as bread upon the waters, to return to us after many days.

M. SEDILLOT'S PLAGIARISM AND MR. FERGUSSON'S OPERATION FOR STAPHYLORAPHY.

In the communication we published from our Paris Correspondent last week, under the head Staphyloraphy, appeared the announcement, that M. Sedillot, Professor at the Faculty of Strasbourg, had presented to the Institute a Memoir on a *new* mode of operating in cases of cleft palate. This *new mode* of operating being Roux's operation, with the addition of division of those muscles by the contraction of which the edges of the wound are drawn asunder. We can scarcely conceive the Members of the French Institute so grossly ignorant of the progress of Surgery as not to be aware that this new operation of M. Sedillot's was successfully practised in this country years before M. Sedillot "conceived the idea."

The imagination of that gentleman, we have no doubt, was excited by the perusal of the writings of the Author of the operation in question. How gentle the hint he received, our readers may judge from the following extract from Mr. Fergusson's Paper in the 28th Volume of the Medico-Chirurgical Transactions:—

"I propose, as an important accessory to the operation of staphyloraphy, that the surgeon should, on strictly scientific grounds, and in accordance with the modern principles of myotomy, so conduct his incisions as to destroy all motory power in the soft palate for the time being, and thus permit that repose of the stretched velum which is so essential to a happy result; in other words, I advise the division of the levator palati, the palator-pharyngeus, and the palato-glossus muscle. The first of these steps I deem of the greatest importance, the second scarcely less so, and the third may be effected or not, as the circumstances seem to demand. It will be observed that, by dividing the above-named muscles, all motory influence in an outward, upward, or downward direction is cut off, and the only muscles which can act in anything like a direct manner upon the soft palate, are the superior constrictors of the pharynx. These, however, will only act during deglutition, and even then their tendency will be to throw the parts closer, instead of separating them."

A drawing of the parts concerned in the operation was given in the paper from which the above is an extract, and cases detailed, to show that its advantages were practical and not theoretical. This paper was published in 1845. In the second edition of his Practical Surgery, Mr. Fergusson repeated his opinion as to the propriety of his operation. In 1847, in a lecture of Mr. Fergusson's, corrected by himself, and published in the *Medical Times*, the subject was again brought before the Profession; and finally he gave, in the *London Journal of Medicine* for January and February, 1849, the result of fifteen cases operated on by himself, (in one of which, by the way, Roux's operation had been three times tried and as often failed,) and nine operated on by others, including his own colleagues, Messrs. Partridge, Simon, and Bowman, the distinguished Professor of Clinical Surgery at University College, Mr. Avery, and others.

Did M. Sedillot reckon on the ignorance of his audience when he, in so cool a manner, ventured to characterise as a new operation that, the particulars of which had been published by another some five years ago, in the Transactions of one of the most learned Societies in Europe, in the pages of a monthly, and in our pages—a weekly Journal of large circulation? Or was he ignorant of Mr. Fergusson's papers when the idea of dividing the muscles in question entered his mind?

Surely, none after this will dispute the right of M. Sedillot to be termed either the most forgetful, or the most ill-read Surgeon in Europe. For our part, we are willing he should choose which of the two titles he considers most suited to describe his mental condition.

But, unless he plead guilty to the charge of ignorance, our conviction is so strong, that he *must* have seen Mr. Fergusson's papers before he read his own Memoir to the Institute, that we shall henceforth class him among those whose eager desire for notoriety blind their consciences to the moral turpitude of plagiarising other men's ideas and passing them off for their own.

THE NAVAL ASSISTANT-SURGEONS.

Captain Boldero's successful motion last Monday night, in the House of Commons, must have taken the Lords of the Admiralty by surprise. They must have been rather unprepared for this deliberate expression of censure on the course they have pursued towards the Naval Assistant-Surgeons. For it is an expression of censure, when the same House which heard the well-known declaration, that there were no available cabins for Assistant-Surgeons on board ship, passes a resolution significantly recommending that such cabins should be found.

Some resistance will probably yet be made towards carrying out the intentions of the House; but such resistance can be only temporary. Every vote of the House, however thinly attended such House may have been, and however small the majority, is always complied with, sooner or later, unless the Government counteract its influence by a counter resolution immediately afterwards. In the present case, the Government do not feel sufficiently interested to adopt such a course; and, that danger being avoided, we may feel assured that if the Admiralty attempt to resist the expression of the House, they will have next year a vote on the subject that will at once settle the business.

While we congratulate most sincerely the active movers in this matter—among whom the able author of the exposition of the case of the Naval Assistant-Surgeons should be especially mentioned—we would urge upon them the necessity of not feeling too sure that the battle is yet quite won. The inner ramparts are still undestroyed, and are not likely to be surrendered without a struggle. But the vote of the House is an engine of war, before which even the Admiralty's defences must go down. It should, however, be brought to bear on them as speedily as possible.

The thanks of the whole Profession are due to Captain Boldero, for his able and convincing speech. Mr. Hume supported him excellently.

THE LICENTIATES OF THE COLLEGE OF PHYSICIANS.

In another column will be found a letter from a Correspondent, calling in question the validity of our censure on the College of Physicians, for tacitly permitting certain of its Licentiates to assume the title of M.D., although they are not Graduates of a recognised University. "Ιατρος" appears to have some rather confused notions on the subject, and he must pardon us for placing clearly before him the real facts of the case.

The College of Physicians have never been put, and are not now, in a position, to grant to any one the degree of Doctor in Medicine. Their Charter simply gives them the power of causing all persons practising in London, or within seven miles, as Physicians, to enrol themselves in their Corporation, under certain penalties, in a manner determined by the Charter and the By-laws. Except in peculiar cases, the College makes the express stipulation, that such persons shall previously have been regularly educated at an University, and shall have taken its degrees.

This rule is absolutely necessary to preserve the status of the College; and it is a rule which the College is not likely to alter. In one instance only, exceptions to it have been permitted. Under particular conditions, such as a certain age and period of practice, it has been decided, that the preliminary qualification of an University M.D. shall be dispensed with, and the person at once admitted to examination for the license. The wisdom of this regulation is very doubtful; and there are not a few, even within the walls of the College, who desire to see it repealed. But, admitting that it is a boon in the case of a few individuals who may wish to become Physicians, after a toilsome life of general practice, and yet may not be able to undertake the University attendance necessary for the Doctorate; there can be no doubt that it is an infringement of the spirit of the original Charter of the College, and if it were attempted to extend its action to any extent it would be strongly opposed by the Universities, whose rights and privileges would be seriously compromised by its operation.

But even in the case of such an extension, if the College of Physicians choose to admit to its licentiateship, any one, no matter whether a University Doctor of Medicine or not, it

could not confer upon such individuals the title of Doctor of Medicine, nor, when it invests its "*Licentiates*" with all the "privileges" insisted upon by our Correspondent, can it possibly include among them a title which an University only is legally authorised to grant.

If our Correspondent, instead of indulging in a quibble, and confusing himself with verbal criticisms, will go at once to the root of the matter, and demand why the College of Physicians, which can thus give its license to practice to those who are not Doctors of Medicine, should not have the power of conferring also that title of Doctor, and thereby of virtually assuming the functions of an University, he will be opening a question which we should be glad to see brought under public notice. We will give him a fair field, and respect his arguments, even though we may dislike his cause.

NATIONAL INSTITUTE OF MEDICINE, SURGERY, AND MIDWIFERY.

In consequence of the late hour at which the important meeting of the National Institute was held, we are obliged to defer our remarks until our next. We may, however, say, that there was a marked difference in the attendance on this occasion, as compared with that of last year, being by far more numerous, and seemingly as spirited as numerous. On the merits of the matters discussed we must not now enter.

SELF-SUPPORTING DISPENSARIES.

We wish to call the attention of our readers to the Report of a Meeting, to be found in another part of our Journal, concerning the proposal to institute Self-supporting Dispensaries. It is useless to conceal the fact, that Institutions of this nature have met with no small amount of opposition from the Profession. Mr. Smith, of Southam, however, reports very highly of the plan, not only as regards the effect they necessarily must have in elevating the character of the poor, but as a means of repelling the inroads made on the Profession itself through the agency of Poor-law Guardians. At any rate, a very considerable move seems to have been made in the matter; and, as we have but the advancement of Medicine and its legitimate Practitioners at heart, we invite our readers to favour us with their views and opinions concerning Self-supporting Dispensaries, and especially with the result of their practical acquaintance with them.

SAINT MARY'S HOSPITAL, PADDINGTON.

We are about to witness another noble monument of British liberality arise for the relief of suffering humanity. Saint Mary's Hospital is shortly to be opened for the reception of patients. Institutions, like individuals, have reputations to build and to maintain; and it may be well to inquire, upon what grounds depend the fame and the success of a Hospital? Certainly not upon architectural beauties or overflowing funds. But its fame and its success depend upon the high character and Professional skill of its Medical staff. And what is the best method to insure efficient officers? We have seen many Hospital appointments filled up; and, with shame and grief be it spoken, without reference either to the qualifications of the officer or the welfare of the patients. Nepotism, favouritism, even bribery have been resorted to. We heartily wish Saint Mary's Hospital all prosperity, and we trust that the Institution will start in good faith, and with untainted name — ensured by *fairly* throwing its offices open to competition, so that the merits of each individual candidate may be thoroughly investigated, and the best men chosen. It was said, that the election of the Medical staff to this Hospital was to be a faithful one; but now we are told, that a Committee are to "recommend" a chosen few to fill the several posts.

We strongly protest against any such mode of election. We are quite ready to acknowledge the claims of the working Committee to reward; but we do think a less objectionable means might have been found than allowing them to elect—as virtually they will—the Medical staff. Besides, as it seems to us, the Committee are pledged, by their public advertisements, to vest the power of appointment in the hands of the Governors at large; and we are quite sure that Mr. Lane,—whose claims we do not for a moment dispute, and whom we shall be delighted to find filling a post he will so well become,—would feel himself more honoured in his election by the Governors, as a body, than by the mere recommendation of a Committee.

We trust we have been wrongly informed.

NATIONAL INSTITUTE OF MEDICINE, SURGERY, AND MIDWIFERY.

A Special Meeting of this Institution was held on Thursday evening last, at the Hanover-square Rooms, when there was a large and influential attendance of the Profession. Among the gentlemen present we noticed Messrs. Bowling, of Hammersmith; Tunaley, of Wymondham; Paget, of Leicester; Gale, of Shepton Mallet; Dalrymple, of Norwich; Smith, of St. Mary's Cray; Headland, Bird, Burnett, of Alton; Day, of Isleworth; Propert, Squibb, Ancell, Thomas Martin, Reigate; Drummond, of Brighton; Parker, of Woburn; Gibson, of Ulverstone; Webster, of Dulwich; Lobb, Lowther, of Cambridge.

Nathaniel Clifton, Esq., took the Chair.

At the onset, Mr. Propert said that the reason for proposing the Chairman from out of the Council of the Institute was, that they might have some one as President who, from his knowledge of the matters in hand, would be capable of answering any question which gentlemen in the meeting might wish to put. (Hear, hear.)

The Chairman, in introducing the business of the meeting, said: I assure you it is a subject of great gratulation to me to attend this meeting; for though we have been now twenty-five years in seeking our object, yet it must be remembered as an incentive, that we are seeking that status which our education and position in life fully entitle us to demand. And although I feel much gratification at the present moment, yet I must freely confess we are now thrown back just to that position which we at first occupied, and that through the conduct of the College of Surgeons. We have been quite ready to meet the College, and we have, as we supposed, up to a certain point, been met by them; but their discussions have been protracted, and, at the eleventh hour, when we thought that all things were arranged, we have been thrown back and repudiated by that very body of whom we had a right to expect better things; therefore, I have a right to believe that they never meant that the arrangements they pretended to engage in were ever to be carried out. Gentlemen, the time is now come when we must act with one mind, and, by mutual concession, effect our object. *Magna est veritas, et prevalæbit.* An effort should now be made by the Profession, throughout the kingdom, for we must feel that all action, as between us and the College of Surgeons, is for ever at an end, and that we have nothing now to hope for but in our own united exertion. It is only by a strenuous exertion—as illustrated by the old fable of the bundle of sticks—it is only while we are united, that we shall be invulnerable and invincible. I trust that your cordial and cool deliberations to-night will present to the Government such an example as they cannot withstand. We are the most numerous, influential, and useful corporate body in the country. Why, then, are the College of Surgeons to repudiate us, considering us as but the amphibious link between a Profession and a trade? (Hear, hear.) Let us henceforth show that we are one and invincible, with all that can characterise men and civilians; and though we may not live to witness it, yet most undoubtedly our principles will prevail. (Loud applause.)

The Secretary then proceeded to read the Report, which was as follows:—

On the occurrence of an important juncture in the negotiations on medical affairs, the Council of the National Institute have felt it to be their duty to convene a general meeting for the purpose of placing before their members and the Profession at large such information as might appear necessary to explain the course which the Council, acting on behalf of the General Practitioners, has pursued during the progress of the events that have recently transpired. Appointed to watch over the interests of the Profession by the most numerous Association that has ever been formed, and accepted by the Government as the representatives of the General Practitioners, your Council have acted throughout under a deep sense of the responsibility that attached to their position and labours. Whilst, on the one hand, the obstacles to an equitable and satisfactory adjustment of the medical question inspired them with caution, lest by any precipitancy their objects might be endangered, the divisions and jealousies on the other hand which distracted the Profession, and impeded its progress in science and its public usefulness, made them anxious to effect an arrangement that might, without doing unnecessary violence to the interests of established institutions; secure to the General Practitioners the possession of those indefeasible corporate rights for which they have so long contended. This task was, however, surrounded with embarrassments, for the government of the Profession having been for many generations in the hands of a privileged class, who had been self-elected to office and irresponsible in the exercise of their powers, vested interests of the most absolute and exclusive character had been created, and these were so intimately interwoven with every abuse, that it appeared difficult to accomplish a comprehensive reform of either of the old Institutions, and of the College of Surgeons in particular, without destroying its special constitution and character.

The members of the College of Surgeons have been discontented with the constitution of that body since its first establishment, but no attempt that had been made to reform it up to the time of the organization of the National Association had been attended with the least success. That body, seeing the numerous difficulties that opposed a more liberal re-constitution of the College of Surgeons, profiting by the experience of past efforts, and justly indignant at the new insults which the Council of the College had cast upon the Profession, through the operation of the Charter of 1843, adopted the policy of establishing a new and independent College for the General Practitioners.

It will be remembered, that in the month of April, 1845, at the instance of the late Secretary of State, Sir J. Graham, a joint Deputation of General Practitioners and Members of the Society of Apothecaries was formed, "with full authority in behalf of the National Association to accept such a Charter as the Crown might be advised to grant, and, on behalf of the Society of Apothecaries, to relinquish their present privileges." The Committee of the Association, by a unanimous vote, appointed the late venerated R. R. Pennington, Esq., with James Bird, Esq., and Henry Ancell, Esq., to fulfil this highly important trust; and, at a public general meeting of the Association, in the month of May, at which as many as 900 members of the Association are reported as having been present, this appointment was fully confirmed. The Deputation, consisting of these gentlemen, on the part of the Association, and John Ridout, Esq., and John Bacot, Esq., on the part of the Society of Apothecaries, ad-

hered, with the most scrupulous exactitude, to the principles of the Association, and succeeded in obtaining from the Government a Bill—that bearing date the 7th of May, 1845—the only one of the many which have been introduced into Parliament, in which the General Practitioners were in any adequate degree provided for. This Bill met with the determined opposition of the Royal College of Surgeons. The Deputation agreed to certain modifications, not as desirable in themselves, or likely to prove acceptable to the General Practitioners, but with the hope, and the Council say, with an opinion, that it would induce concessions on other questions; and that the effect of such mutual concessions would be, to smooth the way for a general measure of Medical Reform receiving the sanction of the Legislature in the then Session of Parliament. Notwithstanding these concessions, the opposition which the Bill met with induced the Government of the day to abandon it, and the joint Deputation made their final Report on the 25th of February, 1846.

The National Association having deemed it prudent, in consequence of the abandonment of legislation at that period, and of the altered aspect of Medical affairs, to commit their powers to the Council of the National Institute, your Council were required to organize the Profession upon a more permanent basis, and to define the principles of a general policy to which the largest amount of support from all parties might be obtained, and which would be best calculated to heal the dissensions which harassed and divided the Profession. In undertaking this duty, your Council, as the successors to the position occupied by the Committee of the National Association, adopted the principles and general views of that body as the basis of the new organisation. More than 4000 General Practitioners in the Metropolis and the provinces had already subscribed their adhesion to those principles, and since this was the largest number of Practitioners that had been enrolled in support of any course of policy that had hitherto been offered to the Profession, the Council felt justified, on the simple ground of a numerical calculation, in adopting principles that appeared to be so universally acceptable.

The Council, however, did not content themselves with this assumption, but reconsidered the principles and the grievances which they professed to remedy in all their bearings upon the interests of the various classes of the Profession. They were aware that the controversy which then agitated the Profession had its immediate origin in the injustice committed by the Council of the College of Surgeons, under the Charter of 1843 upon the great body of members of that College. They sympathised strongly with those gentlemen in the indignation which the arbitrary nomination of a few selected members, most of whom were at that time undistinguished by any superiority in social station, intellectual attainments, or scientific repute, to a collegiate status of honour and privilege, from which the oldest and the most respected members of the College would be thenceforward, and for an unknown period, definitively excluded.

Strenuous efforts had been made to obtain reparation for this injustice, but in vain. The Council of the College of Surgeons had declared their positive determination to abide by their Charter, and persisted in the exclusion of the members from the exercise of any corporate rights in the College. Every effort that had been made towards obtaining redress from the Council, both by the Committee of the National Association and other bodies having been firmly repulsed, no other course appeared open but to seek for the free exercise of those rights in a new College which had been denied to them in the old.

Other considerations also impressed the necessity of instituting a new and independent College for the General Practitioners. There was a strong feeling in the Profession, which had already been emphatically expressed by various associated bodies, of the urgency of establishing a uniform standard of qualification and legal *status* for all denominations of Medical Practitioners in the United Kingdom. It was felt that no scheme could possibly give satisfaction that did not attempt to realise these principles; and although objections might be offered to the amalgamation of all classes of the Profession in a single faculty, yet it could not be contested that the union, in one Institution, of all the denominations of Medical men acting as General Practitioners, would be a measure of the highest justice and utility.

The College of Surgeons, from its position and influence was regarded, by a considerable number of the Profession, as the body which ought to be converted into such an institution; but, upon application to that body, it distinctly rejected any propositions having such an object, and thus arose another powerful reason for the establishment of a new College for the General Practitioners.

It is not necessary for the Council to dwell upon the events connected with the appointment, by the House of Commons, of a Special Committee to inquire into the state of the laws governing the Medical Profession, as these transactions have been already reported. The evidence taken by that Committee, however, made it necessary for the Government to take some steps towards the settlement of this long-disputed question; and, in consequence of the failure of the attempts to carry a measure through Parliament made by Sir James Graham, the present Home Secretary, Sir George Grey, was induced to suggest the expediency of convening a Conference of representatives of all the interests engaged in the question, to which he especially required, that delegates from the body of General Practitioners should be invited.

In accordance with this intimation, the Conferences held at the College of Physicians took place.

The zeal which Mr. Pennington, Mr. Bird, and Mr. Ancell, had evinced throughout the long-protracted, intricate, and arduous negotiations and proceedings relating to a Charter of Incorporation, and a legislative enactment to give effect thereto, during the negotiations carried on by the National Association, induced the Council of the Institute to nominate those gentlemen to represent the General Practitioners in the new Conferences. The lamented death of Mr. Pennington deprived the remaining members of the Deputation of his co-operation during the latter part of the proceedings of the Conference; but Messrs. Bird and Ancell have throughout fulfilled the arduous and responsible trust of representing at these Conferences the interests of the General Practitioners.

These Conferences commenced in the month of January, 1848, and at first presented some ground of hope that, by mutual concessions, forbearance, and a dispassionate examination of the claims made by the General Practitioners, an amicable termination of the dissensions that had prevailed would be achieved. At the earlier meetings of the Committee of Conference, held after the reception of the Delegates from the National Institute, the principles of a Bill for re-organizing the Profession were unanimously adopted. These principles recognised, as a first proposition, the grant of a Royal Charter for the incorporation of the General Practitioners, and the draft of a Charter was subsequently agreed to. According to its provisions, the new College would be empowered to examine the candidates for its letters testimonial in all branches of knowledge, including Surgery, which were indispensable to the due qualification of a General Practitioner. These preliminaries having been settled, an outline of a Bill was drawn up in accordance with the principles, and was sent in to the Secretary of State for the Home Department, as the united act of the Conference, to which all parties had pledged their concurrence and support.

So far the deliberations of the Conference had been conducted with apparent candour, singleness of purpose, and success. Differences of opinion that had necessarily arisen had been urged with moderation, and harmonised by a desire to bring matters to a satisfactory arrangement. When, however, the Government undertook to reduce the outline of a Bill, that had been drawn up by the Conference, to a legal shape, the Council of the College of Surgeons intimated their dissent to its principles, although formally agreed to by their representatives, and raised objections to the unfettered power of examining candidates for its diploma, that had been conceded to the proposed College of General Practitioners, and especially required, that the draft of Charter for the new College should be revised previous to its being acted on by the Government.

This demand necessarily re-opened the most important questions relating to the powers and functions, of the new College, and led to a series of discussions in which the Delegates of the National Institute energetically contended for the absolute right of the proposed College to examine in all branches of medical and surgical science.

Whilst, however, your Council were resolved to abide by the right of appointing the course of study for the candidates for General Practice, and conducting an unrestricted examination, embracing Surgery as well as other branches of professional knowlege, they were willing, for the sake of obtaining a settlement of the question, and tranquillizing the Profession, to forego the formality of specifying the candidates proficiency in Surgery in their certificate of qualification, leaving this privilege to the College of Surgeons, who would be authorised by the Bill to make a special examination in Surgery.

In accordance with this view, the subjoined resolution was, on the 2nd of May, 1849, unanimously passed by the Conference Committee, and forwarded to the Government as the definitive conclusion of the question.

"That the Council of the Royal College of General Practitioners shall have the power to direct the entire course of study to be followed, and to test the competency of the candidates for the Diploma of the College by such examinations as it may deem necessary, prior to their admission into the said College. But it is clearly understood by all parties assenting to this Resolution, that the competency of the persons examined to practise surgery shall not be specified in the Diploma; such Certificate of competency in Surgery being provided for by the subsequent examination at the Royal College of Surgeons."

Your Council were moved with surprise and pain on being informed by their Delegates, that the Council of the College of Surgeons had a second time departed from the pledge thus given by their representatives in the Conference, and that they declined to abide by the terms of the resolution. The Council refused to assent to the power to examine in Surgery, proposed to be granted to the College of General Practitioners.

Other meetings of the Conference have been held since that time, and your Council have been officially informed of the final determination of the Council of the College of Surgeons to resist the grant of this right to the College of General Practitioners. The Conferences are, therefore, virtually closed.

The Council particularly desire to impress upon their members, and the Profession, that throughout these negotiations they have adhered, firmly and undeviatingly, to the essential principles to which they stood pledged at their original organisation. They have not yielded on any point which, by conceding, would have impaired the efficiency or status of the proposed College of General Practitioners. Whilst there were so many conflicting interests, and so many varieties of opinion to conciliate, it would have been impossible to have carried on any negotiation, by indulging in a pertinacious tenacity with respect to matters that were rather of nominal than of essential importance. The Council hoped to be able to bring the question in dispute to a satisfactory issue, and their Delegates, with great judgment and moderation of conduct, conceded many points that did not virtually affect the interests of the General Practitioners, in the expectation that, by so doing, the fears and jealousies of the existing institutions might be removed and a comprehensive measure of Medical Reform carried out with benefit and satisfaction to all classes of the Profession. Such hopes have not been realised, and your Council have only to add, that all their efforts at an arrangement having failed, the Institute reverts to its original claims, unimpaired and unprejudiced by past negotiations.

These conferences having been thus brought to a conclusion, it becomes necessary to reconsider the policy adopted by the Council in their demand for a new and independent Incorporation for the General Practitioners. The Council do not forget that the principles they now advocate are identical with those for which the General Practitioners contended at the grant of the first charter to the Royal College of Surgeons. The collective testimony of successive reclamations, made through a period of more than fifty years, bears witness to the reasonableness and the equity of these principles. The present demands of the National Institute have been transmitted through a series of associated efforts, and this body, at the present moment, represents the wishes and claims of the General Practitioners since the first public agitation of their rights and grievances, at the close of the last century.

It may not be generally known, that when the promoters of a Charter for a new College of Surgeons, in the year 1797, sought to effect their object by Act of Parliament, the General Practitioners throughout the country opposed the scheme, because there was no recognition of their rights in its provisions, and because it contemplated the exclusion of all Medical men practising midwifery and pharmacy from the enjoyment of any offices and privileges in the projected College.

This was the first protest made by the Profession against the principles of the Charter of the College of Surgeons; and it was, for the time, successful. The House of Lords threw out the Bill.

Nevertheless, despite the opposition of the Profession, and the condemnation of the principles by Parliament, the promoters of the Bill obtained surreptitiously from the Crown, a Charter, containing precisely the same provisions as those comprised in the Bill, and thus a flagrant injustice was perpetrated upon the great body of Surgeons in this country.

The Charter of 1800 having been granted in defiance of the Profession and of Parliament, it could not be expected that its operation would be either advantageous to the interests, or agreeable to the feelings and wishes of the Profession.

Associations continued to be formed subsequently to the grant of the Charter, for the purpose of securing a recognition of the rights of the members, until the year 1812, when the Profession made a combined effort to obtain an incorporation in which the important principles now contended for by the National Institute should be realised. These efforts ended in a compromise, of which the present Society of Apothecaries was the result. On this occasion, also, the Council of the College of Surgeons opposed all attempts for the improvement of the Profession, and, by a disclaimer of their previous pledges, succeeded, at the eleventh hour, in frustrating the objects of the General Practitioners. The conduct of the Council of the College of Surgeons, at that time, was similar to its behaviour during the recent Conferences, when it did not hesitate to repudiate the acts of its Delegates, and to disavow the authority with which they had been formally invested.

The Council of the Institute feel that their position is fortified by all the acts of the past history of the Profession. They stand upon the old ground occupied by the General Practitioners of 1797 and those of 1812. They are convinced that claims that have been revived by every important Association that has successively arisen, must be based in justice and the necessities of the Profession, and must eventually issue in a successful realisation.

It remains to be seen to what extent the claim for a new and independent Charter for the General Practitioners is affected by the recent acts of the Council of the College of Surgeons. The Council are of opinion, that the proceedings of the Council of the College of Surgeons strengthen the justice and expediency of the claim, and more than ever show the prudence of the policy upon which your Council have hitherto acted. It may be confidently asserted, that any tendency to a more liberal constitution of the College of Surgeons that the Council of that body may have manifested, has been caused by the efforts of the National Institute to establish a College which shall attract to it the sympathies and support of the General Practitioners. The policy of the Institute has had, therefore, the indirect advantage of abating the pretensions of the governing body of the College of Surgeons. The Council, however, can discover no evidence of the probability of such a reform of the constitution of the College of Surgeons being effected as shall supersede the necessity of an independent incorporation.

Anxious to obtain the most complete unanimity of opinion, and the widest co-operation that was possible upon the Medical question, the Council convened a meeting of Delegates from other associated bodies, on the 20th of November, 1849, when the various points upon which discussions had prevailed were brought under consideration. At this time the Council of the College of Surgeons published their intention of effecting an amendment of their Charter, so as to repair the injury originally inflicted by its provisions; and, for the purpose of ascertaining the extent of the concessions which the Council were disposed to make to the members, and what modifications of their Charter they contemplated, with the view of embracing within that Institution those members of other sections of the Profession who were engaged in general practice, your Council concurred in the appointment of a Deputation, by the meeting of Delegates, to wait upon the Council of the College of Surgeons.

The Council of the College granted an interview, and replied to the Deputation by letter, addressed to the Council of the National Institute, in which they distinctly affirmed, that they would not consent to any alteration of the Charter of the College which would convert that Institution into a College of General Practitioners. They would consent neither to a liberal enfranchisement of the members, nor to the right of a General Practitioner to a seat on the Council.

The Council of the Institute have always regarded these points as essential to any satisfactory adjustment of the Medical question; for, whilst the franchise is limited to a small number of voters, and the Council is exclusively confined to those gentlemen who, as consulting Surgeons, have distinct and often opposite interests to those of the General Practitioners, the latter could have no security in the maintenance of a high standard of qualification for members of their own order, upon which alone the respectability, efficiency, and *status* of their class must depend. Whilst General Practitioners are excluded from the governing Council, the possession of the franchise by the members, to whatever extent it might be conceded, would be a nullity. The power to elect none but pure surgeons to the higher offices of the College, would be a delusive concession to the demands of the members, for whilst it could give no protection to the members, it would tend to augment the influence of the governing body, by appearing to invest their authority with the sanction of a popular election.

The Council reiterate their opinion, that the elevation of the General Practitioners in social estimation, and their usefulness to the public, depend upon the maintenance of a high standard of professional qualification, which the experience of past years evidences beyond all doubt can be accomplished only by placing the control of the education and examination of candidates for general practice in the hands of members of their own class. This is a proposition to which the Council of the College of Surgeons have avowed their repugnance, and the Council of the Institute have, therefore, no hope that the College of Surgeons will be modified to an extent sufficient to embrace their views.

There are other interests, however, that must be considered before any scheme of general legislation can be arranged. The Society of Apothecaries, acting under an Act of Parliament, are armed with penal powers for the suppression of illegal practice, and the Profession would strenuously resist any attempt that might be made to weaken or abrogate powers that might be wielded with so much advantage to the interests of the legally qualified practitioner. The other institutions are disposed to abolish the functions of the Apothecaries' Society, but they have shown no willingness to accept the penal powers now exercised by this Society; on the contrary, they have been hitherto averse to the maintenance of legal restriction on unqualified practice. The Council believe that the Profession will never consent to the Society being superseded at the sacrifice of so important and valuable a safeguard of their professional privileges; and on the other hand, the Society, for itself, will not consent to lay down its authority, unless it be made over, intact in all respects, to a body more capable of making it efficient. There is, then, no expectation that these valuable powers can be preserved, except through the medium of a new and independent College.

A liberal and comprehensive plan of legislation must also provide for all those gentlemen in general practice who are not members of the College of Surgeons; and the Council have reason to believe that the Government would not entertain any proposition that did not embrace all classes of the Profession, and place them upon a footing of equality in their respective Colleges. For these various considerations, which originally influenced the decisions of the Committee of the National Association, and subsequently the Council of the Institute—considerations which no act of the Council of the College of Surgeons has yet in any degree weakened, the Council still earnestly recommend the Profession to contend perseveringly for a new and independent incorporation for the General Practitioners, with full powers of controlling the education and examination of candidates for admission to their class, as the only certain means of introducing harmony and order into the Profession, of obtaining a free exercise of corporate rights for the General Practitioners, of promoting their respectability, and enhancing their efficiency and usefulness, in their ministrations to the necessities of the public.

In concluding this Report, the Council of the National Institute cannot too strongly express their feelings of gratitude to Messrs. Bird and Ancell for the untiring zeal and energy they have displayed in representing and enforcing the interests of the General Practitioners at the several meetings of the Conference at the College of Physicians; and they feel that the Profession at large owe an equal amount of obligation to those gentlemen for breaking up those Conferences, rather than accept an Institution with the same limitation with respect to the examinations in surgery which have operated prejudicially in the arrangements of 1815.

NATHANIEL CLIFTON, Vice-President,
Chairman.

The conclusion of the Report was received with loud and long-continued applause.

Mr. Ross, the Secretary, then announced that letters, acknowledging the importance of the views and interests advocated by the Institute, and pledging the writers to give it their support in every way, had been received from Mr. Prankard, Mr. Garlick, of Halifax, Mr. Watterworth, Mr. Allison, of East Retford, Mr. Cartwright, Mr. Cooke, of Trinity-square, Mr. Birt, Mr. Spence, Mr. Gibson, Mr. Cass, Mr. Spooner, Mr. Colthurst, &c. &c.

Mr. Dewsnap moved the adoption of the first resolution, which he read to the following effect:—

"That the Report now read be received and approved by this meeting."

A Member of the Council seconded the resolution.

Mr. W. Robins was unwilling to cause any disagreement or difference of opinion, but he would rather prefer that the resolution be, "That the Report be received," and not adopted. It was utterly impossible, in a meeting like this, that all present should approve of everything contained in that Report, and that too on once hearing it read. If he had had the opportunity of reading it carefully, he might, perhaps, approve of it all; but he could not do so on merely hearing it read once. He did not intend, however, to make an amendment on the Report.

Mr. Gale had little expected to find that any one would try to cause disunion. (Cries of "No, no.") He had heard the Report most distinctly, and was perfectly satisfied that every well-wisher to the interests of the Profession would not only receive, but adopt every part of that Report. He would advise the gentlemen who had proposed and seconded that resolution not to modify it in the least degree; if they did, they would be assisting to ruin the cause they had met that night to support. He (Mr. Gale) spoke on that occasion as the mouth-piece of five General Practitioners of Somersetshire; but he was convinced, if it had been known he was coming to attend the meeting of the National Institute, he should have been the mouth-piece of every Practitioner in Somersetshire, except those who had basely accepted the fellowship of the Royal College of Surgeons. (Loud cheers.) He sincerely trusted there would not be any division or amendment on the question.

Mr. Propert reminded the meeting, that the resolution did not bind them to anything; it merely proposed that the Report be received and adopted.

Mr. Paget, of Leicester, would wish to inform Mr. Robins of the real nature of the Report. It was merely a succinct history of what has been done respecting the long-mooted question of collegiate medical reform. This every member of the Profession was supposed to be acquainted with, and the resolution simply proposed that this Report or history be received.

A Gentleman in the body of the meeting suggested that the only objection that could be raised to the reception of the Report, was the supposition, that doing so necessarily involved the acceptation of the principle of a new and separate College of General Practitioners.

The Chairman assured the meeting, that the adoption of the resolution did not involve any such question.

Mr. Jones said, that, in his opinion, the Report merely bore testimony to certain facts which had transpired in the course of the proceedings of the Deputation. It gave merely a retrospective view of the past; and no one could, in fact, object to its being received, unless they could allege it stated that which is not true. (Loud applause, and cries of "Question.")

The resolution was then put, and carried unanimously.

Mr. Bowling then read the second resolution, to the following effect:—

"That the following Memorial to the Right Hon. Sir George Grey, Bart., Her Majesty's Principal Secretary of State for the Home Department, be adopted by this meeting."

Mr. Ross, the Secretary, read the Memorial to Sir George Grey, as follows:—

TO THE RIGHT HONOURABLE SIR GEORGE GREY BART., HER MAJESTY'S PRINCIPAL SECRETARY OF STATE FOR THE HOME DEPARTMENT, &c., &c.

The Memorial of the General Practitioners in Medicine, Surgery, and Midwifery of England and Wales, adopted at a public Meeting of the Medical Profession, held at the Hanover-square-rooms, Hanover-square, April 11th, 1850,

Showeth—

1st. That your Memorialists are legally-qualified members of the Medical Profession, and are General Practitioners in Medicine, Surgery, and Midwifery.

2nd. That nine-tenths of the Medical Profession

in this country belong to the class which your Memorialists represent, and that they are, of necessity, the ordinary Professional attendants of many members of the aristocracy, and of by far the greater proportion of the middle classes of Society; and that, with the solitary exception of the Metropolitan charities, they may be considered the exclusive Medical attendants of the labouring population in town and country.

3rd. That the necessities of this large proportion of the population demand that the General Practitioners should, as a class, be fully competent to practise Medicine, Surgery, and Midwifery, not only in all ordinary cases, but also in every emergency; and that, under a judicious administration of the Act of 1815, the only legal authority by which the education and examination of the General Practitioners have been regulated during the last thirty-five years, notwithstanding the imperfections and limitations of that Act, the competency of the General Practitioners in every branch of Medical practice has progressively and steadily augmented.

4th. That the General Practitioners of this country respectfully but firmly assert their right to direct the education of their own class, and to institute examinations of the competency of individuals intended for general practice, and to manage and control their own affairs; and that they view, with the greatest possible alarm, every proposal to deprive them of that right, and, thereby, of the power of sustaining and elevating their standard of education and qualification in accordance with the present rapid advancement of every other department of science and art.

5th. That the General Practitioners would regard, not only the abrogation of the present privileges under the Act of 1815, by virtue of which they have obtained their present position, but the continuance of the limitations and restrictions at present imposed on them in the education and qualification of candidates for general practice, as a deplorable result of the long agitation of the question of Medical Reform, and that no settlement of the question on such a basis could prove final.

6th. That upon every occasion when it has been proposed to entrust the education and examination of the General Practitioners to the Colleges of Physicians and Surgeons, the General Practitioners have almost unanimously objected to such an arrangement, on the ground that they are refused any participation in the rights and privileges of those Colleges, and that those Colleges have indicated their disinclination to admit either the necessity or the expediency of a high standard of qualification for general practice; and, in particular, that the College of Surgeons has employed its influence in the direction of limiting the qualifications and degrading the character of its members,—the vast majority of the Surgeons of this country,—for the advantage of the Fellowship, comprising a very small minority; as instance, in the recent reduction of the age of admission of members from twenty-two to twenty-one years, while the education for the Fellowship is continued until the age of twenty-five years.

7th. That, as respects Surgery, the most serious attention of the Right Honourable the Secretary of State for the Home Department is respectfully called to the fact, that at the present moment, throughout this country, which is computed to contain between three and four millions of poor, this large proportion of the population is professionally attended and operated upon in all the most severe and dangerous surgical cases, under the orders of the Government, by members of the College of Surgeons, whom the Council of the College, by their public acts and declarations, regard as having been educated to meet the ordinary exigencies of practice only, notwithstanding every one of those members of the College has fulfilled all the requirements of the College authorities.

8th. That such declaration of the Council of the College of Surgeons, that the members of the College have been educated for the ordinary exigencies of surgery only, is virtually a charge of incompetency, and, as respects the great body of surgeons, an unjust calumny; and the College authorities have no other justification for such an erroneous assumption, than their own acts, the policy pursued by the Council having been, as heretofore recited, to limit the acquirements of the members; and your Memorialists aver that the public are wholly indebted to the broad basis of scientific acquirement, and the progressive elevation of the standard of education adopted by the administrators of the Act of 1815, taken together with the individual zeal and emulation of the Medical Profession, for the actual high degree of surgical competency possessed by the members of the College at large; the exceptional cases of incompetency being for the most part attributable, on the one hand, to the policy of the College in requiring of members proofs of competency *for ordinary exigencies only*, and on the other hand, to the defects of the Apothecaries' Act, by which the legal examining Board for general practice has been prevented, constituting a perfect curriculum of education, and an adequate test of surgical as well as medical competency in the examination of their candidates.

9th. That as the law punishes General Practitioners for the mismanagement of surgical cases, the law should enable the General Practitioners to attain for themselves as high a standard of surgical, as well as medical education as practicable.

10th. That the anomalous and deplorable state of the laws generally, which at present affect the Medical Profession, and the defects necessarily resulting from the special character of the existing Colleges, together with the vast and daily increasing number of persons practising the Profession without conforming to any of its legal provisions, calls for the interposition of a paternal Government, and renders speedy legislation imperatively necessary, as much for the public interests as for the peace and well-being of the Profession.

11th.—That a vast majority of the Profession, the General Practitioners, from the absence of any bond of union or legally authorised Executive to represent them, have for many years past been placed in a position of the greatest embarrassment and humiliation; and that, owing to this radical defect and the want of sufficient controlling power over the Executives of the existing Medical Corporations, they have hitherto been unable to obtain a recognition of their claims to corporate rights and privileges, or protection from illegal and unprofessional practice,—privileges which they deem essential to the welfare and dignity of the Profession.

12th. Your Memorialists, in conclusion, for these and divers other cogent reasons, most respectfully urge, that Her Majesty may be advised forthwith to grant to the General Practitioners of England and Wales, a Royal Charter for the foundation of a new and independent Royal College, incorporating, in the first instance, all those individuals at present practising as General Practitioners of Medicine, Surgery, and Midwifery, with a representative Government, and equal rights and privileges for all its members, and giving authority to regulate the education, and to test by examination in every branch of Medicine and Surgery, all future candidates for its membership; and furthermore, that Her Majesty's Government may be induced to frame and carry through Parliament, with as little delay as possible, a Medical Reform Bill, for the future regulation of the Medical Profession, containing provisions calculated to harmonize the existing Institutions with the spirit of the age, and giving effect to the new Incorporation of those engaged in the general practice of Medicine, Surgery, and Midwifery, throughout the country.

The paragraph announcing the intention to apply for a Royal Charter of Incorporation for a new College was received with immense applause.

Mr. Bowling then said he had experienced great satisfaction at the manner in which the Report had been received. There was one part to which he wished particularly to draw their attention, as there might still be some men who were yet anxious to cling to the College of Surgeons, notwithstanding they had been so often spurned by it. The part to which he alluded was where it was stated the Institute had summoned delegates from all parts of the country. Among others Mr. Bottomley came, and they were glad to see him among them, not only as the Chairman, but also as being the recognised champion of the Associated Surgeons. He (Mr. Bottomley) proposed a series of suggestions, and they were carefully considered by the Council. Some of these were very good, and some were contradictory, but they induced the Council to make one more effort to remove the suicidal delusions of the Council of the College of Surgeons. He called them suicidal, for, if persisted in, they would infallibly end in the destruction of the College. (Cheers.) He (Mr. Bottomley) could tell them the reception his suggestions met with. The insulting letter which was sent in reply they all knew. (Hisses.) Mr. Bottomley, in consequence of that letter, was the first to come forward to propose a resolution, that it would be useless to apply to them again. The delusions entertained by the Council of the College of Surgeons were most extraordinary. They believed that the members of the Profession were only fighting for a new College, to enable them to get the duties of the Apothecaries' Company done better than they are at present. This was a great error; it was no such thing. They were seeking for a new College, in order that the duties of the College of Surgeons should be better performed. (Great applause.) The powers of the Apothecaries' Company are limited; they are not allowed to examine in midwifery or in surgery, nor even in any part of anatomy, save in visceral anatomy. We cannot blame them, therefore, for not doing what is not in their power. The Council of the College of Surgeons had reduced the age of candidates for membership from 22 years to 21, while those who sought the fellowship had to continue their studies till they were 25. He would ask them, if from their recollections they could say they were fit, at the age of 21, to go into the country to practise their profession, and, perhaps, to perform severe surgical operations? (Cries of "No, no.") The new Institution must have the power to examine in medicine and in surgery, and in every branch of science connected with their Profession. He (Mr. Bowling) believed the Government were with them; but they were so hampered by the existing Colleges, that they did not know how to proceed. The examination for the membership of the College of Surgeons is not what it should be, or why should Her Majesty's Government require that Assistant-Surgeons in the navy, when seeking for a step of promotion, should undergo another examination. Every month it is announced that Mr. So-and-so has passed as a Naval Surgeon, having, perhaps, been admitted a member of the College five years previously. He would again urge on them to adopt this resolution.

Mr. Paget, of Leicester, in seconding the resolution, observed, there was but little for him to say after the very full remarks that had fallen from Mr. Bowling, and he was glad it was so, for his habits of life were rather those of thinking and acting than of speaking. He most cordially approved of all that Mr. Bowling had said. The Government were in a position of doubt from the disagreements and divisions now existing in the Medical body; the disagreements arising from the divisions. The artificial, the untenable division into Physicians, Surgeons, and General Practitioners, was the cause of their disagreements, and until these were wiped away, Government can do nothing for the Profession. They say to us, agree among yourselves; if we do any thing for one of you, we should be opposed by the others. Let not, then, further discussion be excited. This Memorial is the only step that can now be taken. A Charter of Corporation for themselves must now be sought for. If they called on the Government to alter the Charters of other bodies, they would say they could not do it; and the other authorities, if they were applied to, would refuse, relying on the Charters they possess. But if they can get a Charter of Incorporation for themselves, it would cause the other bodies to tremble, and induce them to apply for a modification of their own Charters, so as to remedy their grievances; and then they might do better than by the establishment of a third Institution. He cordially seconded the adoption of the Memorial.

Mr. Bottomley, after expressing a hope, that whatever remarks were made by any one, would be received with attention, and that he had been for years a staunch Medical Reformer, stated, that he differed totally from the Memorial. They did not want any more Institutions. What did they require a College of General Practitioners for? The proposal was insulting and degrading to the provincial surgeons. ("No, no!" Hisses.) All negotiations with the Council of the College of Surgeons having ceased, in consequence of the insulting reply they had received, the Deputation had waited on Sir George Grey, and had been very well received. The provincial Surgeons had hoped that interview would have influenced the Council of the College to obtain some modification of their Charter, but they were as yet unacquainted whether anything had been done. The provincial surgeons had felt all along that they would be degraded if they were to be enrolled in a College of General Practitioners. They were very different to the General Practitioners in London. They were accustomed to attend all difficult cases, and to perform

all the serious operations in surgery; in fact, they considered themselves to be Physicians and Surgeons entitled to take high rank in the Profession, and to seats in the Council of the College of Surgeons. Medicine and Surgery were undivided, and the Examining Board should test the qualifications of the candidate in every branch of science. It matters not whether the College be in Lincoln's-inn-fields or in Pall-mall, provided it be based on a firm, liberal, and representative principle. All honours should be conferred only on members distinguished by professional talents. A gentleman present had said he was the mouth-piece of five General Practitioners; now he (Mr. Bottomley) was the representative of three thousand members of the Profession, all of whom were opposed to the incorporation of a College of General Practitioners, which, if once established, they would be down for ever! (Loud cries of "No, no," hisses, and other cries of opposition.) They would never be able to carry their point. He then moved the following amendment:—

That this meeting is of opinion that the Secretary of State be respectfully requested to advise the Crown to enfranchise the whole body of the Medical Profession in this country; so that every legally-qualified member of their Profession may possess the right of electing the Council which is to make laws for the regulation of their Professional conduct; and that this meeting is of opinion, that no modification of the Charter of the College of Surgeons will be acceptable to the Medical Profession, unless the General Practitioners be admitted to seats in the Council.

Mr. Lewis seconded the resolution, because he was unwilling to quit his home, and his home was the College of Surgeons. It is in evidence that Sir James Graham had listened to Sir B. C. Brodie, and had enforced one Charter on the College; and he thought there was no doubt that, if the General Practitioners would exert their influence, Sir George Grey would cause a new Charter to be received, embodying the changes which they require.

Mr. Smith, of Footscray, remarked, that all that was really valuable in the amendment was what they themselves had always advanced,—namely, a complete examination in all the branches of Medical Science. Mr. Bottomley's scheme was quite Utopian. He appeared to wish to blend them all into one body,—to give them voices in all their Institutions. Or would he have them knock again at the College doors? He remembered the kind reception the Deputation had met with at the College, and, with Mr. Bottomley, he thought that all was gained. Then came that most insulting letter, and, after that, are they to knock again? ("No, no.") The amendment was somewhat obscurely worded; he had heard it read, and with great attention. Mr. Bottomley wishes the incorporation of the whole body of the Profession. He asks for the embodiment of Physicians, Surgeons, and Apothecaries in one. Is it likely that such would ever be granted? ("No, no.") Whilst we climb the ladder by the side of the College of Surgeons, we may get above them; but, if we climb a ladder below them, they may soon kick us to the bottom. (Loud cheers.)

The original seconder of the amendment then withdrew his opposition.

Mr. Jones then seconded the amendment.

Mr. Thomas Sturge: The test of qualification should be one and indivisible; and this should be considered as the true path to the real *ultimatum*. The proposal now made should be considered only as temporary, to give way to a better.

Mr. Robins: I think this question should be fully discussed. We come here not only to adopt what you propose, but to discuss what is most conducive to the welfare of the Profession. I see on the platform gentlemen who have endeavoured to procure the enfranchisement of the Profession; and, if they have not attained that object—yet that is not the point—we go on the principle of the matter. My belief is, that, for the good of the public, we ought to have a new body of efficient Medical men. Now, will not this be better achieved by a new College which would embrace the whole Profession. We should still have Surgeons, Dentists, Accoucheurs, and Physicians then as now, and I am convinced that it is the only way of securing efficiency.

Mr. Clarke: I came here hoping that there would be unanimity. After all the meetings, deputations, writings, and memorials during these five or seven years, I had hoped that gentlemen would have felt it would be derogatory to seek further to enter the portals of the College. I am surprised that a man like Mr. Bottomley, having been spurned and kicked by the College, should now be found knocking at the door of that very body to be let in. The seconder is for a one-faculty system. But what is this but a one-faculty. If, after several years hard struggling, you find that you have no position, then, I say, the only resource is to seek for an independent Corporation of our own—an Institution in which we can manage many of the minor reforms which the Profession requires. I understood that Mr. Bottomley had said that it was no use trying further.

Mr. Bottomley contradicted this.

The Chairman: I was Chairman of the meeting when Mr. Bottomley moved the following resolution:—

"That upon the receipt of a letter from the Council of the College of Surgeons, it is inexpedient to make any further application to the Council of the College."

Mr. Bottomley: That is perfectly correct. But I understood it was stated that *I wished* to go to the College.

Mr. Clark: I thought at one time that the College would have done justice to its members. Now how do we stand? A great deal has been said upon the remark of Mr. Skey, that we are but an amphibious link between a profession and a trade. I agree with this. But why do we meet now but to sever that link? (Hear, hear.) We are come to break the state in which we are suspended, like Mahomet's coffin, between heaven and earth. The College will not alter its Charter to the full extent, and we have nothing to do but unite and agitate with an unerring aim, and I sincerely hope we shall attain our object.

Mr. Ancell: I am anxious to remark upon what Mr. Robins said, namely, that he agrees to 11 of the 12 clauses in the Memorial. We prepared that Memorial advisedly, knowing the sentiments of the General Practitioners; we knew that those 11 clauses contained matters on which probably there could be no dispute, and the Council put in the 12th, as containing all matters that could lead to any discussion in the meeting. I apprehend that Mr. Bottomley will admit that the Council had taken care that the objects of this meeting should be fully advertised, and the *Daily News*, on this and previous days, had articles calling on Medical men to attend this meeting, and I presume that Mr. Bottomley, being here as the opponent, has brought forward all the arguments he has to urge; and I stand here as sanctioning Mr. Bottomley in his presumption. I have carefully analysed every thing, and I have found that the only semblance of argument was that the General Practitioners would thereby be degraded. But is this not a justification of the calumny put on the provincial surgeons? and if we are not to admit that as an argument, we have none other to answer. If gentlemen in the country are opposed to us on this point, let them bring forward their arguments; but we do not believe that there is any large body in the country who are opposed to our policy. It has been put to us that we might seek enfranchisement in the College of Surgeons. Now, we all agree, that, if we could have the College of Surgeons we should like it. But here the question lies,—What is it right that we should get? There are many reasons why the College of Surgeons should be supported; but are we to go on knocking at the door when we cannot get what we want? No Minister of the Crown will compel a corporation to abrogate its charter. Even Sir J. Graham's policy is not fairly represented. The College were petitioners for that Charter. But as to the expediency of our course, we believe that our duty is to demand a strictly independent Charter of Incorporation. (Loud cheers.)

Dr. Webster: I rejoice that the question now is between a faculty of medicine and an independent College of General Practitioners. I go for an incorporation as a means to an end. As to going to the College of Surgeons again, I think every one here (Mr. Bottomley among the rest) will repudiate it. It is impossible. What was the object of creating the Fellowship? And what has been the effect of it in the College of Physicians? Heart-burnings for 300 years. You had in the College of Surgeons Fellows, then odd Fellows, then young Fellows. And what are you to have next? I suppose school-Fellows. I am sure there are plenty of silly Fellows. (Laughter and cheers.) Now, what we are to contend for is this,—let us but get an incorporation—I care not where—and let us remember that one word—"representation"—(cheers)—and see that you are fully represented in any body, wherever you are.

Mr. Bowling in reply, said: The question is, what can we do for the future? We know that the one faculty system is not attainable, and, therefore, why are we not to seek what we can get. It does appear, that, if the amendment be carried, it can only keep up the agitation.

The amendment was then put and lost, and the resolution carried (five hands only being held up for the amendment.) The result was received with loud cheering.

Mr. Bowling proposed the Deputation to wait upon Sir G. Grey, which, having been seconded, some little discussion arose as to Mr. Bottomley's name appearing on the list.

The Chairman: I think we may depend upon Mr. Bottomley; and I hope that we may feel perfectly safe on that score.

Mr. Gibson, of Ulverstone, briefly moved the fourth resolution:—

"That the Petitions to both Houses of Parliament now read be adopted by this meeting, and that copies of the same be transmitted to the various Medical Reform Associations and others interested in the settlement of the Medical Question, with a request that the same may be submitted to the Members of the Profession generally for signature, and forwarded, with as little delay as possible, to their representatives in Parliament, for presentation, and that the Council of the National Institute be requested to carry out this resolution."

Mr. Parker seconded the motion, and suggested, that a great deal might be done by individual exertion; and that, though they might not be speedily successful, yet their point would be carried if the Profession cultivated good feeling towards each other.

Motion put and carried.

Mr. Gale moved—

"That the interests of the Profession at large, at the present moment, demand that unanimous and cordial support be given to the National Institute, for the purpose of maintaining, strengthening, and extending the present organization of the General Practitioners in Medicine, Surgery, and Midwifery; and that a voluntary Subscription-book be forthwith opened, for the purpose of collecting Funds to enable the Council of the Institute to carry out in full the measures now adopted by this meeting."

I agree with all you have done, and move this resolution with much pleasure; I shall also be glad to give my 5*l.* towards the object of the Institute.

Mr. Smith seconded the motion, which was then put and carried.

Mr. Clark suggested that the names should not be confined to the Profession alone, but that clergymen, &c., should also sign.

The Chairman thought this might be very well left to the Council.

A vote of thanks was then passed to the Chairman, which he acknowledged, and the meeting broke up.

REPORTS OF SOCIETIES.

WESTMINSTER MEDICAL SOCIETY.

March 16, 1850.

Dr. Murphy, President, in the Chair.

ON THE ENTRANCE OF AIR BY THE OPEN MOUTHS OF THE UTERINE VEINS,

CONSIDERED AS A CAUSE OF DANGER AND DEATH AFTER PARTURITION.

Dr. Cormack read an elaborate paper, illustrated by experiments and cases.

Dr. Cormack commenced his paper by showing, that the phenomena which follow the introduction of

air into the veins vary exceedingly in character and degree, according to certain circumstances. This was proved and illustrated by a narrative of experiments performed by Dr. Cormack on the lower animals; as well as by the recital of two cases in the human subject. The first was a lady operated on by Sir Benjamin Brodie, and who recovered. The details, as communicated to Dr. Cormack by Sir Benjamin, were read to the Society. The other was a case which occurred at Barnes in 1848, some of the leading facts of which were elicited at the inquest, and reported in the *Medical Gazette* and *Lancet* of that year. Dr. Cormack was with the man during some hours, which he survived after the accident, and examined the body after death. After discussing the various effects caused by the entrance of air into the veins, and the appearances on dissection, a statement of facts was made, proving, anatomically and clinically, that the entrance of air by the uterine veins not only might be, but had, in numerous cases been a source of danger and a cause of death after parturition. A similar opinion had been enunciated by Legallois in 1829, also subsequently by Ollivier, and, in 1837, it was supported by Dr. Cormack in his graduation thesis at Edinburgh. Dr. Meigs, of Philadelphia, and others, had referred to the power of the recently emptied uterus to suck in air on the removal of pressure on the abdomen, but without reference to the immediate subject of this paper. Dr. Cormack next noticed the possibility of air entering the open mouths of the uterine veins, if not properly closed, and if the uterus contract in such a manner that the air contained in it cannot escape through the os. The air would pass on to the right cavities of the heart, and, if in sufficient quantity, cause death. This is not a mere speculative opinion, but cases had actually occurred; three having been published by Drs. Bessems, Lionet, and Wintrich, and three unpublished cases having been communicated to Dr. Cormack by Dr. Lever. The remarks made by Professor Simpson, of Edinburgh, in Dr. John Reid's Appendix to his Essay on Air in the Veins ("Physiological, Anatomical, and Pathological Researches") were next noticed and commented on. The introduction of air into the veins was by no means necessarily fatal. The case communicated to Dr. Cormack by Sir B. Brodie, others which have been published, and the result of experiments performed on animals by Dr. Cormack, prove the contrary. The most effectual way of preventing the entrance of air into the uterine veins would be, the employment of such means as tend to cause contraction of the uterus. If air have entered the veins, a main indication is to relieve the distended heart by venesection, which should be performed in the arm rather than in the jugular vein, especially if the patient be convulsed. If the symptoms be rather those of syncope, without much trouble of the respiration, stimulants and cold aspersion on the face may be sufficient. The air may be absorbed, if the patient can be kept alive for a sufficient length of time, and no permanent bad consequences may result, though Dr. Cormack had witnessed the occasional recurrence of death from pneumonia, after apparent recovery.

Dr. Snow mentioned a case which he thought had probably some bearing on the paper which had just been read. It was that of the wife of a medical man, to whom he was called to give chloroform during her confinement. Labour pains not having commenced, he retired to rest; when they did occur, parturition took place so rapidly, that it was over before he could be with her. She had had hæmorrhage in previous labours, and it was feared that the same thing would happen in this. The uterus, however, appeared to contract very well, and he (Dr. Snow) assisted in applying the bandage, after which he left the house. A few days afterwards, he met Mr. Propert, who attended the case, and he (Mr. Propert) told him, that soon after he (Dr. Snow) had left, some very alarming symptoms occurred. Although there was not any hæmorrhage, the lady said she felt as if she were dying, and there was scarcely any pulse at the wrist. She recovered under the use of stimuli, and was quite well in a few days. He (Dr. Snow) was quite unable to account for this at the time; but now he thought it probable that air had entered through the uterine veins. The contraction of the uterus following its relaxation might cause a sufficient quantity of air to enter to produce considerable mischief. Some years ago he had seen some experiments on horses, the results of which fully bore out Dr. Cormack's observations. It required a great quantity of air to be thrown in to destroy a horse; the inspection of the body immediately after showed the right heart, the pulmonary artery, and its branches filled with a bright, frothy blood. Death, he thought, in these cases, happened from a mixture of asphyxia and syncope. One of the horses lived for twenty-five minutes after the experiment. In neither of the horses was the frothy blood found in the left heart. He regretted Dr. Cormack had been stopped in giving full particulars of the Barnes' case. He wished to know whether air was found in the cerebral sinuses to account for the occurrence of tetanus.

Dr. Murphy had seen three cases of unaccountably sudden death after parturition. The bodies had been most carefully examined, and if air had been present in the uterine veins, it certainly would have been discovered. If such a thing did occur, he thought death would be the rule, and not the exception.

Mr. Marshall inquired at what period it would be safe to inject the uterus, that is,—when are the uterine veins closed. He had frequently injected the uterus, and was sure that air had entered from the syringe, and yet no bad results had followed.

Dr. Cormack considered the accident extremely rare; but was convinced that it might and had occurred. In Bessem's case the air was injected by the syringe, and it was possible that the muzzle of the instrument had been passed into the uterus, opposite a vein, and thus the air was thrown in directly. In cases where it happened spontaneously, it might, perhaps, occur, and yet no notable phenomena be encountered in consequence. Many things were requisite to force the air into the veins, after it had passed into the uterus; the os must be completely closed. Women to whom this might happen are generally anemic, and die sooner in consequence. He had himself frequently injected the uterus, and would do it again without much apprehension, taking care that the instrument did not touch the uterine parietes, and that there was a free exit from the uterus for the air. He would, however, use all other measures for arresting hæmorrhage first.

March 30, 1850.

Dr. Murphy, President, in the Chair.

A paper was read by Dr. Willshire

ON THE ECLAMPSIA NUTANS OF MR. NEWNHAM,

OR THE SALAAM CONVULSION OF SIR CHARLES CLARKE.

The author stated, in his introduction, that of this peculiar malady, only four well-authenticated and detailed cases were, so far as he could discover, on record; and for these, and much interesting information on the subject in question, the Profession were indebted to Mr. Newnham, of Farnham. He, Dr. Willshire, intended this evening to add another case to those he had just mentioned, which had occurred to him in a child six months old, at the Infirmary for Children. The primary, essential, or pathognomonic sign of the disease is a peculiar bowing forward and downward of the head, in some cases even to touch the knees, whilst in others it is rather a quick "nodding," repeated nearly as often as 150 times in the day. The severe attacks of this peculiar or "salaam" movement of the head have been mostly preceded by sleep, and the severity of the attacks seems somewhat proportionate to the depth and intensity of that sleep. As the disease progresses, fits of more general convulsive movements become allied to the motion of the head, the former partaking in some instances of the epileptiform, in others of the tetanoid variety or type. Still later, paralysis is apt to occur, either in the form of paraplegia or hemiplegia, and lastly, complete mental imbecility is the sequence, or such a severe shattering of the intellectual element as is only recovered from slowly, and with great difficulty. In the case which had occurred at the Infirmary for Children, there were some points of important difference in the course of the malady. It agreed completely, however, with the main and essential definition of the illustrations given of the malady by Mr. Newnham, in the following particulars; viz., in the peculiar motion of the head, in this motion occurring markedly and immediately after sleep, and never, so far as could be discovered, during the somnolent condition; in that motion becoming allied, during the progressive increase of the malady, with an intercurrent form of general convulsive or automatic action; in the marked effect which was seen to be produced on the intellectual powers. It differed more particularly as follows; viz., in not being accompanied by paralysis of any form; in not being followed by permanent injury to the mental powers, at least so far as could be judged of in the youthful age of the patient; in not being fatal, and in apparently yielding to what was, as it seemed, a right mode of treatment. The treatment which seemed to influence the disorder consisted in the following particulars:—The application of blisters behind the ears, the keeping the bowels relaxed by castor oil, and the internal administration of the iodide of potassium and the bisulphate of quinine. Dr. Willshire, after entering into some detail connected with the pathology of the disorder, and its relation to presumable centric and excentric causes affecting the nervous centres and the peripheral extremities of nerves, stated, that he considered it probable it was *centric* in its origin, and having first as its seat the sensorium, or those important parts placed between what are termed by Mr. Solly, the hemispheric ganglia, and the top of the spinal cord. That the lower or non-sensorial portion of the spinal apparatus becomes, in some instances, afterwards affected, is proved by the general automatic movements being of the tetanoid character. In the other case, the latter being distinctly epileptiform, pointed still further to the ganglionic centre interposed between the cerebrum and the spinal cord, as the centre of mischief; whilst the hemiplegia, which has been seen to follow, and the supervening affection or obliteration of the mental powers, indicate the secondary involvement of the great hemispheric lobes. As to what might be the nature of the morbid elements in the lesional disturbance which occurred, *wheresoever* it first originated and *whatsoever* it drew after within its range, much doubt must exist, seeing that, among the *desiderata* yet to be obtained, *post-mortem* examinations were the chief. Mr. Newnham had thrown out the suggestion, that the essential character of the malady was inflammatory action of a weak and strumous character of the membranes investing the medulla oblongata, and afterwards extending to other parts. He, Dr. Willshire, did not think we should be far wrong in assuming the more primitive causes to consist in a change of the circulation of the smaller vessels, of a scrofulous character, following upon which change occur alterations of structures, deposits upon or in the latter, and such morbid conditions in the nutritive formation and reparation of the substance of the nervous centres; as were not only little compatible with the performance of their normal actions, but which were, in truth, causative of others intensely abnormal in their character.

CORRESPONDENCE.

LICENTIATES OF THE COLLEGE OF PHYSICIANS.

[To the Editor of the Medical Times.]

Sir,—In your editorial remarks, addressed to Dr Inglis, under the head "Homœopathic Statistics," in your last number, you state:—We regret to acknowledge that the London College of Physicians *does* grant its license to others than such as possess the degree of M.D.; and, moreover, if it does not directly sanction, it certainly allows those in possession of its simple license to style themselves Doctor. To this rank they have no more right than have the Licentiates of the Apothecaries' Company, the Members of the College of Surgeons, or the Licentiates of the Pharmaceutical Society. The College of Physicians may create Physicians,—*medici*; Universities alone can make Doctor,—*doctores*."

Now, Sir, supposing you to be serious in what you have stated, and that it is your opinion, founded on good authority, that a Licentiate of the College of Physicians has no more right to the title of Doctor than a Licentiate of the Pharmaceutical Society, you will, perhaps, permit me to make a few observations on the subject. You say, the College of Physicians may create Physicians,—*medici*. The true meaning of the Latin word *medicus* is Doctor of Physic, and it is used synonymously with *Medicinæ Doctor*. Therefore, according to your own admission, the Licentiates are Doctors of Physic. You likewise add, Universities alone can make Doctors—*Doctores*. The word Doctor does not imply Physician in any sense; and the meaning of the word is—a master, a teacher, or instructor. It is obvious, from your statement, that, where Graduates in Medicine of Universities are not Physicians, they are only dubbed teachers of medicine, instructors. How the English and Scotch Graduates in Medicine will relish this reading I know not. If there be a distinction between an M.D. and a duly licensed Physician, there must be an equal distinction between a licensed Physician and an M.D. But what says the diploma

from the College of Physicians? I will give one extract:—"Et ei concessisse liberam facultatem et licentiam tam docendi quam exercendi scientiam et artem medicam, eidemque *summis honoribus et titulis et priveligiis* quæcunque hic vel alibi Medicis concedi solent." How you may translate "et titulis et priveligiis" I know not; but certainly one title of a Physician is Doctor from time immemorial; and the present unsettled state of Medical politics scarcely calls upon the advocate, for a settlement of the differences which now exist, to express an opinion which may set the highest branches in the Profession at further variance.

I am, Sir, your obedient servant,

April 6. Ιατρος.

MEDICAL REFORM.

[To the Editor of the Medical Times.]

SIR,—As I may not be able to attend the meeting called for April 11th at the Hanover-square Rooms, please to allow me a space in your columns for a few remarks before the meeting. Do not let the lateness of the communication prevent its insertion in your next number. What reform do the majority of General Practitioners want? I respectfully submit the following; namely, neither more nor less than a Bill of Parliament to secure the members of the College and Hall against unlicensed practitioners. For this, and this only, let surgeons and apothecaries as one body unite.

As the law now stands, the College of Surgeons gives no protection to its members, expensive as the obtaining its diploma is. Surely, for all the money the College takes from its needy members, it ought to protect them from the host of quacks which now, like locusts, plague the land. As for the protection afforded by the Apothecaries' Society, it is but an insulting mockery. What does that body of worthies offer when applied to for aid? Just what old Elwes the miser offered to an aspirant for the hand of one of his nieces. "I understand," said the suitor, "you will give ——" "Give! give!" said the old miser, "it is a word I seldom use; but if I did, I will give—my consent for you to have her, and that is all." Now, just so says the Apothecaries' Company—"We will give our consent to prosecute in our name, and nothing more." Now, if the College and Hall were united, and honourably appropriated the admission to Membership fees to the good of the whole body, then substantial aid might be rendered to every injured Member, and thus more would be done to raise the Medical Profession than by anything in the world besides.

To say nothing of the pecuniary loss inflicted on the licensed Members by unlicensed Practitioners, there is a heavy moral evil. These fellows stand for nothing. To lie, and cog, and steal, is bred in their bone, and must come out in their flesh. We know that everybody is bad enough; for, as an old friend of mine used to say, human nature is a great rascal; but these gentry are too bad, as the statesman said; or, rather, all bad. Their whole life is a lie. A man cannot inflict a heavier curse on his son than to push him surreptitiously into an honourable Profession. As Dr. Vaughen remarks, "No man is justified in entering upon an honourable calling who is wanting in any of the requisites for its prosecution, free from all compromise or degradation." Now, quacks and unlicensed men want all the requisites.

The old saying, that a liberal education made a man a gentleman, is not, unfortunately, strictly true; but this we do find, that in general there is an infinite difference in correct feeling between the regular and irregular Practitioner. There is a sensitive spot somewhere in the qualified, but the others are like what their patients too frequently before their time become—dead corpses.

In conclusion, then, I would again urge upon the forthcoming assembly the necessity of urging this point, namely, a combination of Surgeons and Apothecaries, to secure protection to its Members, and thereby advance the interests of the Profession, and certainly, along with it, the welfare of the public.

I am, &c.,

JOHN LEIGH.

St. Ives, Huntingdon, April, 1850.

[To the Editor of the Medical Times.]

SIR,—Will you allow a resident in East Anglian, and a subscriber to your Journal, a space in its columns to urge upon his Medical brethren in the provinces, as well as the metropolis, the necessity of union in their demands for a redress of the grievances under which they labour.

I do not address you because I have any thing new to advocate, or because my advocacy may be better than those who have preceded me, but because I think the present moment a fitting opportunity, when the Council of the National Institution of Medicine, Surgery, and Midwifery have called a meeting of the Profession, to be held at the Hanover-square Rooms, on the 11th inst., to impress upon the minds of those favourable to Medical reform, who have hitherto been lukewarm and indifferent, by keeping aloof from, and taking no part with the promoters, the necessity of coming out from their daily unobtrusive avocations in large numbers, and aid the cause of themselves and the public, by their presence at the meeting.

The objects of the meeting, as stated in the advertisement, appears to be threefold: first, to receive a report from the Council of the National Institute on Medical Reform, which can provoke no discussion; and, secondly, to agree to a form of Petition to both Houses of Parliament, for immediate reform in the laws affecting the Medical Profession. Now, should any difference of feeling exist as to the precise wording of this Petition, let us be unanimous in adopting one in accordance with the requirements of the Profession, "which will secure the rights, elevate the character, and increase the usefulness of the great body."

With regard to the three objects to be presented to the meeting, the presenting a memorial to Sir George Grey, Bart., praying Her Majesty may be advised to grant a new Charter of Incorporation for an Independent College for the Practitioners in Medicine, Surgery, and Midwifery, there may be some discussion, but I hope there can now be no difference of opinion in the minds of any sect in the Profession as to the necessity of this step.

It is quite evident the College of Surgeons is closed against us, and evinces no disposition to open its doors; and, if it did, should we obtain that control in its management we demand or have a right to expect; or could we, after the manner in which we have been treated so long by that Council, have any confidence in our connexion, if admitted to communion with them.

Then, again, the Apothecaries Company are of no use, either to the Profession or the public, as regards protection of either; they refuse, for want of means, or inclination, or some other cause, to proceed against unqualified persons practising; and, what is worse, they have deluded the public and injured the Profession, by admitting to examination persons who have not been apprenticed to the Profession or complied with their regulations.

Therefore, I contend a separate college for the general Practitioners is *necessary*, and I trust a large influential meeting, on the 11th, will decide upon being satisfied with nothing less.

I am, Sir, your obedient servant,

A GENERAL PRACTITIONER 27 YEARS.

April 8, 1850.

EMIGRANT SURGEONS' PAY.

[To the Editor of the Medical Times.]

SIR,—I sit down to pen a few remarks on a subject which has occupied the attention of the public, more or less, now a month; and, as this subject concerns the Profession in a very great degree in every light in which it can be viewed, I have been surprised to find that both medical editors and correspondents have been so silent. Perhaps, however, it little concerns either so directly as to cause each to cry out some short sentence, prefaced with the usual interjection, "Oh!" Though the matter to which I allude does not concern me, so far as I can see, either for the present or the future, I trust I have humanity and friendly feeling enough to proclaim against an abuse which has already been allowed to exist too long. I allude to the choice of surgeons for ships setting out with emigrants to our colonies, and more especially Australia.

I have just been looking for a report on the conduct of a surgeon and officers to an emigration ship, but unfortunately it has been laid aside. What I remember, however, of the facts are sufficient to draw attention and to impress the mind for some months, if not years, with disgust, to say nothing of the astonishment that a British Government, nay, British public, should allow the opportunity for the practice of such conduct as that which has recently been reported, to pass without more note or comment than what the simple affairs of the country appear to get. I have little doubt that your readers are fully acquainted with the report; with that supposition, therefore, I do not deem it necessary to give even an abstract. All that I shall do in conclusion will be to give you as briefly as possible a few thoughts I consider most worthy of attention.

It is proverbial that the Profession is persecuted and ill-paid. This I need not attempt to palliate or deny. Few members of the Profession, however, are worse paid than surgeons who go out in emigrant vessels, especially when we consider that they have to leave their country and their friends, that they are called on to perform responsible and extraordinary duties, and that, to give full satisfaction, it is necessary that they have qualifications, moral, intellectual, and professional, of the highest order. Under these circumstances, I need not ask whether the owners of the ships or the emigrants themselves are at all likely to have applications from individuals who possess these excellencies, when the remuneration is so insignificantly small? I need not ask any of *your* readers, I think, whether they would undertake duties so onerous, when their prospects at the end of a voyage would be so few, and when, if they chanced to return to England, they would be no better off, in either a pecuniary or other view, than they would be when they first found themselves gradually leaving the shores of the country that gave them birth, respectability, education, and an honourable calling? England is too free a country, too happy and delightful a country, to leave and endure hardships that none, in a Profession like ours, ought to endure without sufficient reward. I am sure, that so long as the abuse remains, so long will there be seldom found men in our Profession whom we consider to be good enough for the exigencies of their calling, willing enough to undertake a voyage across the tossing, rolling, and tempestuous ocean, to give up their bodies to the chances of finding a watery grave, and along with it the annihilation of intellects, so far as this world is concerned, that are valuable and useful. I trust, for your own sake, for the sake of that Profession to which you belong, and which you undertake to protect and represent for the sake of the dear tie of relationship and friendship existing in every family and friendly circle, for the sake of justice and humanity, for the sake of civilisation, and for the sake of our honest, industrious, religious, and noble country, you will not allow this matter to rest till you see that every man has justice done, and that every member of our Profession is well and duly paid according to his merits.

I am, Sir, yours respectfully,

A REFORMER OF ABUSES.

TEETOTALLERS AND THE "LEAN EXTREME."

[To the Editor of the Medical Times.]

In the notices to correspondents last week, you seem apprehensive, that as your correspondent "Teetotaller," hastens from one mode of destruction he is approaching another; and you quote the poet, who says, "But more immedicable ills attend the lean extreme," as if this dangerous lean extreme was a necessary or even a probable consequence of abstaining from alcoholic drinks. Instances are not uncommon of the loss of some superfluous obesity on becoming abstainers, but it has been generally accompanied by improved nutrition, with increase of muscular firmness and of weight. My attention, for the last fifteen or sixteen years, has been much directed to the health of total abstainers, and I have not, in a single instance, observed emaciation as a consequence or any approach to the immedicable ills attributed by the poet to the lean extreme. Pray, have you? And will you have the kindness to account for your apprehension of the probability of such a result?

I am, respectfully,

JOHN FOTHERGILL, M.R.C.S.

4th Mo. 3rd, 1850.

THE DUKE OF WELLINGTON has utterly declined assisting the Naval Assistant-Surgeons, and has stated, that if the matter were brought before the House of Lord, he should advise the House not to interfere. We fully agree with Mr. Guthrie, that it is greatly to be regretted, the Iron Duke was not wounded in some one of his numerous campaigns. Had he ever personally required the services of a surgeon, he would have been better able to appreciate the value and importance of our Profession.

TESTIMONIAL.—A meeting of the Medical students of University College took place on the 3rd inst., at four o'clock, for the purpose of presenting to Mr. H. B. Tuson, their librarian, a handsome silver purse, containing twenty-one guineas, which had been subscribed by them. Mr. Frederick J. Thomas and Mr. James Stoate being treasurers.

HEALTH OF LONDON DURING THE WEEK ENDING APRIL 6.

In the week ending last Saturday, the deaths of 1124 persons were registered in the Metropolis; this number showing only a small decrease on the return of the previous week, though the latter was unduly swelled by an extraordinary influx of Coroners' cases. In corresponding weeks of 10 previous years (1840-49) the average number of deaths was 918, which, if corrected for increase of population, becomes 1001; the excess in last week amounts, therefore, to 123. The following series exhibits the deaths registered weekly since the beginning of March; they were 875, 967, 1026, 1167, and in the last week 1124. The present return, as compared with that of the preceding week, shows a decrease in the epidemic class of diseases, an increase in the tubercular, and in diseases of the brain and nervous system; but in complaints affecting the respiratory organs the two returns are almost the same. As compared with the corrected average of 10 corresponding weeks, the present return shows a decrease in epidemic diseases, but a considerable increase in diseases of the respiratory organs. Bronchitis was fatal last week to 119 persons; pneumonia to 86; asthma to 23; laryngitis, pleurisy, and other complaints of the same class, to 25; the deaths in the aggregate from these causes being 253, whereas the corrected average is only 166. Consumption destroyed 134 persons, nearly the average number. A death from cholera occurred on the 31st of March, at 4, Phœnix-street, North St. Giles-in-the-fields. The deceased was the daughter of a beer-shop keeper, of the age of seven years, and died from "English cholera," after 16 hours' illness. Mr. Simpson, the Registrar, mentions that "the medical attendant, before certifying the cause of death, called on him to explain, that if the late epidemic had prevailed at the present time, he would have considered it right to return the case as 'Asiatic cholera.' The disease commenced with excessive sickness and diarrhœa, and the latter speedily assumed the appearance of rice-water purgings, attended with cramps. The father of the child died of 'Asiatic cholera' during the late visitation. No other person is now ill in the house."

The deaths in the several hospitals of London occurred as follow:—

GENERAL.		Sussex & Brandenburgh-house (Fulham)	0
St. George	4	Northumberland-house	0
Westminster	8	Whitmore House	0
Grey Coat Hospital	1	Pembroke House	0
Charing-cross	2	St. Luke	0
Middlesex	4	Miles'	8
University College	0	Warburton's	3
Royal Free Hospital	4	Lunatic Asylum, Bow	1
King's College	1	Bethlem	0
St. Luke, City-road	1	Lunatic Asylum, Brixton	0
St. Bartholomew	7	Retreat, Clapham	0
London	5	York House, Battersea	0
Guy's	3	New County, Wandsworth	1
St. Thomas	6	Peckham House	0
Bethlem, London-road	2	Camberwell House	2
FOR CONVICTS.		LYING-IN.	
Hospital Ship, Unité	2	Queen Charlotte's	0
Penitentiary Hospital, Millbank	0	British	0
MILITARY AND NAVAL.		City of London	1
Royal Hospital, Chelsea (South)	4	Hospital, York-road, Waterloo 2nd part	0
Royal Hospital, Greenwich (East)	6	FOR PARTICULAR CLASSES.	
Royal Military Asylum	0	Female Servant Invalid Asy., Stoke Newington	0
Coldstream Guards Hos.	0	German Hospital	2
Grenadier Guards' Hospital	1	French Hospital	0
Scots Fusilier Guards	1	Portuguese Jews' Hospital	0
Royal Ordnance	2	German Jews' Hospital	0
Dreadnought Ship	1	FOR SPECIAL DISEASES.	
LUNATIC.		Small Pox	0
Kensington House	0	Fever Hospital	2
Munster-house (Fulham)	0	Lock	0
Normand-house (Fulham)	0	Consumption, Brompton	1
Otto-house (Fulham)	0	Opthalmic, Charing Cross	1
Blacklands-house	0		

TOTAL, 83.

MORTALITY TABLE.

Deaths in the Week ending Saturday, April 6, 1850.

(Metropolis.)

CAUSES OF DEATH.	Total.	Average of Ten Weeks.
ALL CAUSES	1124	918
SPECIFIED CAUSES	1123	911
Zymotic (or Epidemic, Endemic, and Contagious) Diseases	159	162
SPORADIC DISEASES:		
Dropsy, Cancer and other Diseases of uncertain or variable seat	54	49
Tubercular Diseases	186	178
Diseases of the Brain, Spinal Marrow, Nerves, and Senses	162	118
Diseases of the Heart and Blood-vessels	37	31
Diseases of the Lungs, and of the other Organs of Respiration	253	151
Diseases of the Stomach, Liver, and other Organs of Digestion	63	55
Diseases of the Kidneys, &c.	11	8
Childbirth, Diseases of the Uterus, &c.	9	9
Rheumatism, Diseases of the Bones, Joints &c.	11	7
Diseases of the Skin, Cellular Tissue, &c.	2	1
Malformations	6	2
Premature Birth and Debility	31	22
Atrophy	26	13
Age	62	55
Sudden	17	15
Violence, Privation, Cold, and Intemperance	35	29
Causes not Specified	1	7

The following is the number of Deaths occurring from some of the more important special causes:—

Apoplexy	38	Heart	36	Phthisis	134
Bronchitis	119	Hooping-cough	27	Pneumonia	86
Cholera	2	Hydrocephalus	31	Scarlatina	17
Childbirth	6	Influenza	8	Small-pox	4
Convulsions	42	Liver	12	Stomach	3
Diarrhœa	15	Lungs	12	Teething	9
Dropsy	28	Measles	16	Typhus	34
Erysipelas	15	Paralysis	33	Uterus	2

BIRTHS AND DEATHS.

	Births.	Deaths.	Births over Deaths.
Males	697	560	137
Females	646	564	82
Total	1343	1124	219

METEOROLOGY OF THE WEEK.

Electricity.*		March 31, 10 a.m., P. and tension weak. This was the only time that electricity was exhibited during the week.								
Rain in Inches.		0·03	0·00	0·07	0·05	0·15	0·00	0·00	SUM	0·30
Amount of Horizontal Movement of the Air.	Miles.	...	...	...	...	...	...	...	SUM	...
General Direction of Wind.	P.M.	S.	S.E.	S.	S.	S.W.	W.	S.W.		
	A.M.	S.E.	S.S.E.	S.S.E.	S.W.	S.	S.W.	S.W.		
Difference between the Mean Temperature of the day and the same day on an average of 7 years.		+ 0·3	+ 5·7	+ 7·5	+ 5·2	+ 4·9	+ 4·7	+ 2·7		+ 4·5
Ditto. Dew Point.		41·5	42·8	47·0	44·6	47·0	40·9	42·5		43·8
Mean of Thermometer. Dry.		45·9	50·8	52·6	50·3	50·1	49·9	47·8		49·6
Mean of Barometer.		29·646	29·395	29·695	29·231	28·975	29·628	29·573		29·363
Day.		Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday		Means

* In this Column, A. stands for Active; N. for Negative; and P. for Positive.

MEDICAL NEWS.

APOTHECARIES' HALL.—Names of gentlemen who passed their examination in the science and practice of Medicine, and received certificates to practise, on Thursday, the 4th April, 1850:—Henry Wilson Sharpin, Bedford; Edmond James Blyth, Richmond; William Walter Tinsley, Sedgley, Staffordshire; Robert Fowler, Cardigan; Lewis Paine, Great Chard, Ashford; William Dingley, Sherborne; James Thomas Hillier, Broadstairs; George Pound, Axminster, Devon; Alfred Mathias, Lamphey Court, Pembroke; Isaac Dobree Chepmell, De Beauvoir, Guernsey; Samuel Knaggs; Charles O'Callaghan, Killarney, Ireland.

ROYAL COLLEGE OF SURGEONS.—The following Members of the College, having undergone the necessary examinations for the Fellowship, on the 2nd, 3rd, 4th, and 5th inst., were admitted by the Council, on the 11th inst., as Fellows of the College, viz.:—Messrs. George Gwynne Bird, Swansea; South Wales, Diploma dated January 2, 1824; Alexander Bridge, St. James'-street, Nov. 13, 1835, Joseph Maclise, Russell-place, Fitzroy-square, Oct. 13, 1837; George Brown, Kensall-green, May 13, 1839; John Gregory Forbes, Devonport-street, Hyde-park, June 4, 1841; John Thomas Griffith, Peckham, Surrey, April 14, 1845; John James Halls, Down-street, Piccadilly, Nov. 27, 1846; and Joseph Thomas Clover, Aylsham, Norfolk, May 28, 1847.

MILITARY APPOINTMENTS.—18th Regiment of Foot.—Assistant-Surgeon Edgar Dumaresq Batt, from the 98th Foot, to be Assistant-Surgeon, vice Ridgway who exchanges. 55th Foot.—Staff-Surgeon of the second class Henry Mapleton, M.D., to be surgeon vice Campbell, who retires. 98th Foot.—Assistant-Surgeon Archibald Redfoord Ridgway, M.B., from the 18th Foot, to be Assistant-Surgeon vice Batt, who exchanges. Royal Canadian Rifle Regiment.—Assistant-Surgeon Edward W. C. Kingdom, M.D., from the Staff, to be Assistant-Surgeon, vice Cleland, who exchanges. Hospital Staff.—Surgeon Hugh Mackay, from the 42nd Foot, to be Staff-Surgeon of the second class, vice Mapleton, appointed to the 55th Foot. Assistant-Surgeon Alex. B. Cleland, M.D., from the Royal Canadian Rifle Regiment, to be Assistant-Surgeon to the Forces, vice Kingdom, who exchanges.

NAVAL APPOINTMENTS.—Surgeon, Lewis C. Urquhart (1846) to the Archer steam sloop at Devonport. Assistant-Surgeons Christopher K. Ord, M.D. (1847) to the Archer; John L. Palmer (1848) to the Victory flag-ship at Portsmouth.

NAVAL PROMOTIONS.—Assistant-Surgeon George Rae, M.D. (1841) to be Surgeon. Assist.-Surgeon Thomas Graham, M.D. (1841), to be Surgeon.

UNIVERSITY COLLEGE.—At a Special Meeting of the Members and the Proprietors, on Tuesday, for considering the Supplemental Charter of the University of London, it appeared that the Council had proposed, through a by-law, to omit part of the B.A. examination in the case of candidates who came forward with certificates from Oxford, Cambridge, or Dublin. The meeting, however, passed a resolution, unanimously disapproving of such a by-law; and it was also resolved:—"That this meeting regrets the acceptance by the Senate of the University of London, of that part of the Supplemental Charter which enables them to grant certificates in isolated branches of knowledge, apart from any proof of the candidates having gone through a regular and liberal course of education."

UNIVERSITY OF LONDON.—The Chancellor has lately received a Royal warrant, appointing the following noblemen and gentlemen Fellows of that University:—The Right Hon. Lord Monteagle; the Right Hon. Lord Overstone; the Right Hon. Sir James R. G. Graham, Bart., M.P.; the Right Hon. T. B. Macaulay; G. Cornewall Lewis, Esq., M.P.; Henry Hallam, Esq.; and George Grote, Esq.

OBITUARY.—On the 9th instant, in Sackville-street, W. Prout, M.D., F.R.S., aged 64.—On the 23rd ult., L. H. Potts, M.D., aged 60.

VACCINATION.—It was stated in the Cork grand jury room, at the Assizes, that vaccination cost 400*l.* in the Kantush Union.

A NEW OFFICE.—The *Liverpool Times* records the death of Winifred Jones, aged 64, for sixteen years *leechwoman* to the South Dispensary.

The Assistant-Surgeon of the Clyde, 42, is to be tried at Chatham, by court-martial, for drunkenness.

SOCIETY FOR RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN IN LONDON AND ITS VICINITY.—The Annual Dinner of the members and friends of this Society, to commemorate the Sixty-second Anniversary of its foundation, was held on Saturday, the 6th inst., at the Freemasons' Tavern. Sir Charles

M. Clarke, Bart., M.D., the President, in the chair. After the usual loyal toasts, the Chairman proposed, "Prosperity to the Institution." He dwelt impressively on the fact, that this was no place for an appeal to the public for their assistance, since the persons whom he addressed were themselves the supporters of the Society. Were it otherwise, and had he to address, as he wished he had, the wealthy men of this wealthy city; the men who knew the value of time and of money, who live out of debt and within their incomes, and who have secured an elegant competence for their families, then, he was sure, his appeal would be largely and liberally answered; but, as it was, he need only say, that this most excellent Society was founded by some of the greatest physicians and best of men, for the wise and benevolent purpose of enabling its members to secure for their widows and young orphans a provision against want. How this important purpose had been answered, those knew best who knew most about the Society. The printed Report showed, that there had been distributed in half-yearly grants, since 1793, the sum of 99,578*l.*; that last year, the sum so paid was 1,408*l.*, thirty-seven widows and sixteen children. As h[illegible]ces, and by no means rare ones, of the benefits sec[illegible] by membership, he mentioned, that one widow [illegible]w on the list, had received 1,522*l.*, her husband ha[illegible] subscribed only 6*l.* during his life time. Of the rec[illegible] olicants, the husband of one had been a member o[illegible] five years, of another six years, of a third eight years. Dr. Burrows returned thanks for the Royal College of Physicians, many members of which took a warm interest in the prosperity of this Society. Mr. Grainger, after returning thanks for the Royal College of Surgeons, bore strong and feeling testimony to the exertions of the Medical Profession in the time of the cholera; and especially to those of the Union Medical Officers. He had means of knowing, that many of these gentlemen were so repeatedly called up at nights, that they ceased to go to bed or to take off their clothes; and this after a hard day's work. No one knew the amount of heroic endurance called forth in these men during the late epidemic. Mr. Eyles, the Master of the Society of Apothecaries, assured the meeting of the interest shown to this Institution by the Society over which he had the honour to preside. On Mr. Ware's proposing the health of the President, Sir Charles Clarke feelingly expressed the gratification which he felt at presiding over this meeting, and the comfort and happiness which he derived in his retirement at having honestly done his part, to the best of his ability, in the practice of a laborious but most honourable and useful Profession, towards all the members of which he had uniformly felt that they were his friends and brethren. Mr. Stone returned thanks for the Vice-Presidents. He was much gratified at having been elected to that office, and at meeting, on this and other occasions, with his professional brethren, and his respected and valued relative, the President. Mr. Ware also returned thanks for the Vice-Presidents. He had inherited from his father a cordial interest in the welfare of the Society. Dr. William Merriman returned thanks for the Treasurers. He drew attention to the very small number of members, only 352, who compose this Society, compared with the immense numbers residing within the limits of Middlesex and seven miles from the Post-office. He had remarked a complaint of the Poor-law Medical Officers, that they were not included in the proposed plan for securing annuities and pensions to all Government civil officers and their families. He strongly urged all such practitioners, residing within its limits, to become members of this Society. He mentioned, that the Court of Directors had appointed a Committee to inquire into the income and expenditure. This Committee has received the very valuable assistance of Mr. William Farr, under whose advice some important Tables are being prepared to show the statistics of the Society during the sixty-two years of its efficient operation. He read a list of donations, amongst which were particularly remarked, that of H. R. H. the Duchess of Gloucester, 10*l.*, and also that of the Society of Apothecaries, being their thirty-first annual donation of fifteen guineas. Sir James Eyre returned thanks for the Directors, who, he could assure the meeting, spared no pains in carefully discharging the important duties intrusted to them. Mr. Law also took occasion, as a Director, to remark, that only by a careful and well-advised management of the income could their funds, large as they happily are, continue equal to future as well as present demands. Dr. Allison, Mr. Clarke, and other gentlemen, returned thanks for the visiters, most of whom were proposed as members. The Secretary, Mr. Charles R. Walsh, assured the meeting that neither the laws that regulated the granting of relief, nor the mode of administration by the Directors and Officers, entailed any loss of self-respect on the widows or families of members who claimed its benefits. A list of Stewards was announced for next year. The dinner and its arrangements, and especially the music, under the direction of Mr. Grattan Cooke, gave universal satisfaction, and the meeting was sustained with much cordiality till a late hour. Donations were announced to the amount of 200*l.*

SELF-SUPPORTING DISPENSARIES. — A highly respectable meeting of the members of the Medical Profession, and other gentlemen, was held April 2, at 33, Edward-street, Portman-square, for the purpose of establishing a central association, under the title of "The London Society for Promoting the Establishment and Facilitating the Objects of Self-Supporting Dispensaries throughout the United Kingdom and Ireland." Dr. Daniell having been called to the chair, explained to the meeting the nature of the business for which they were met, proceeded to describe the defective state of former systems of Medical relief to the labouring classes, and gave some striking examples of their inefficiency. He then called upon Mr. Hawker, the Secretary, to develope Mr. Smith's plan, which he did in a paper written for the occasion. Dr. Forbes then rose, and congratulated the Profession on the present movement in favour of Self-Supporting Dispensaries, and himself on his having outlived the Professional prejudices which had hitherto impeded the development of the plan of his friend Mr. Smith, of Southam. Dr. Moore, Sir James Anderson, Dr. Cormack, and several other gentlemen addressed the meeting, concurring in the same view, and the following resolutions were then unanimously passed:—1. "That the principle of Self-aiding Medical Provident Societies, as advocated by Mr. H. L. Smith, deserves the cordial support of the Profession and the whole community." 2. "That this meeting pledge themselves to give their best support to the effort now about to be made to establish Self-aiding Dispensaries throughout the Metropolis and the United Kingdom." 3. "That, agreeably with the foregoing resolutions, a Society be now formed, and that it be called "The London Society for Promoting the Establishment and Facilitating the Objects of Self-aiding Dispensaries throughout the United Kingdom and Ireland." 4. "That the following gentlemen be the officers and Council of the Society:—Chairman of the Council—H. L. Smith, Esq., founder of the system. Trustees—Dr. Moore, Saville-row; Dr. J. B. Daniell, Lower Grosvenor-street. Bankers—The Union Bank of London, Argyle-place, Regent-street. Secretary—Mr. T. D. Hawker, M.R.C.S., 33, Edward-street, Portman-square. Council—Dr. Forbes, Dr. Daniell, Dr. Tyler Smith, Dr. Conolly, Dr. C. J. Hare, Dr. Stewart, Mr. Stafford, Mr. Alford, Mr. Startin, and Mr. Yearsley, with power to add to their number." 5. "That the offer of Mr. Hawker be accepted, and that the place of the present meeting be used as the offices of the Society, and that the correspondence and documents be dated therefrom." 6. "That H. L. Smith, Esq., Dr. Moore, Dr. Daniell, Dr. Stewart, Mr. Yearsley, and Mr. Alford be requested to act as a Sub-committee, assisted by the Secretary, and that they prepare rules and regulations for the government and management of the Society; and that they take immediate steps for the creation of funds for the support of the Institution; and that, for this purpose, they give publicity to the plan and objects by advertisements, circulars, lectures, publications, and otherwise; and that they report to the Council, at an early period, the result of their deliberations and proceedings; and that no expenses be incurred until funds are provided."

APPOINTMENTS.—Mr. Taylor, barrister-at-law, has been appointed Assistant-Secretary to the Board of Health. Mr. Davys has received the appointment of Colonial Surgeon at the Gold Coast.

CHOLERA.—This fearful disease has again broken out at Bizerta, a little town in the beydom of Tunis, where the loss has been very considerable. The superstitious and ignorant character of the inhabitants has been shown, by their driving away a French physician sent by the Bey, on the charge, that he caused the disease to spread by his breath and glances. The last charge refers to the widely spread superstition of the "Evil Eye." The Bey has established a *cordon sanitaire* about Bizerta.

VAUDREY *v.* MILLETT.—This was an action tried before Mr. Justice Talfourd and a special jury for libel. Both parties are members of the Medical Profession, the plaintiff having held an appointment under the Poor-law, and had charge of the cholera cases, in the Redruth Union last year. The alleged libel consisted in the following paragraph in a letter to the London Board of Health, which letter the defendant acknowledged having written:—"The Medical men" (that is, those employed by the local Board of Health,) "are the scorn of the neighbourhood; unreduced dislocated shoulders and crooked limbs are the beacons of the public judgment." Witnesses for the plaintiff proved the general high estimation in which he is held, while, on the other hand, nine or ten persons, says the *Times*, were called for the defendant, who had been under the care of the plaintiff for different accidents, and were now cripples, and several surgeons from London, Plymouth, and other parts, gave it as their opinion, that the plaintiff had not shown proper skill in his treatment. The verdict was returned for the plaintiff, 1*s.* damages, the jury requesting the judge would not certify for costs, as it was their wish that each party should pay his own.

CHELTENHAM GENERAL HOSPITAL AND DISPENSARY.—At a general meeting of the Governors and subscribers to the above Institution, held on the 18th of March, the following rule was proposed by the Board of Management, and carried. It was supported by one of the Surgeons of the Institution (Mr. Clement Hawkins):—"No person shall be eligible for either of the offices of Physician or Surgeon till he shall have resided at least one year in Cheltenham, unless a general meeting shall otherwise determine; and no Medical officer of any Poor-law Union shall hereafter be eligible for, or hold any office in the Institution; and, in cases where partnerships exist, only one member of any firm shall hereafter be eligible to any office in the Institution; but the rule shall not in any case apply to the honorary Medical officers at present attached to the Institution, who may already hold office in a Poor-law Union, or may already be connected in such a partnership."—*Correspondent.*

TO CORRESPONDENTS.

"Mr. Barron" on Chloroform in Neuralgic Affections will receive early insertion.

"A Subscriber."—We are not aware that there is any limited period of service for Assistant-Surgeons on the west coast of Africa.

"Peter Thick-in-the-Head's" letter contains an amusing account of a late meeting of Fellows. We cannot publish Peter's letter, but we shall be very glad to know so clever a fellow. Will he favour us with a call?

"A Constant Reader" is referred to Dr. Conquest's work.

"Mr. Henry Peart, of Bromsgrove," writes:—"On January 26th, 1850, I received a letter from A. Collingridge, Esq., Managing Director of the Sea, Fire, and Life Assurance Society, 31, Cornhill, requesting me to examine two young men resident in this neighbourhood, and to forward to him the declarations regarding their health, and stating, that the usual fee would be sent per Post-office order by return of post. On February 9th, I transmitted the declarations, and, not receiving any answer, I addressed a letter to Mr. Collingridge, demanding the fees. On Feb. 22, I received a letter from him stating, that 'the rule adopted by this office is to remit all fees due to medical men on the first Thursday in every month consequently, your fee will be remitted on the first; Thursday in March.' The first Thursday in March and April have passed, and the fee has not been received, and a letter which I lately addressed to Mr. Collingridge has not even been acknowledged."

[We should hope that there has been some inadvertency.]

"Adolescens."—However much we may regret the circumstances, we are quite incompetent to give advice in the matter. We conceive there can be no doubt that a person "within a short period of completing his apprenticeship of five years to a M.R.C.S. and L.S.A." is qualified to begin business as a chemist and druggist.

A Correspondent writes, that "The system of washing in a public institution is a matter of great financial importance in these times of retrenchment, especially in Dublin, where the hospitals are in process of being deprived of their ordinary Government support. It may be that some of your readers could render essential service by giving useful and practical hints for improvement in washing the linen in *maternité* wards. The brushing and boiling to which linen of this kind is subjected, are very destructive; and a trial of 'Twelvetrees'' process has tended to fix, rather than remove the stains. Information tending to economy, as well as to the cleanliness and appearance of linen, is requested."

"H., Pontefract."—The blood in phthisis exhibits all the ordinary characters of inflammatory blood; the fibrine is always on the increase, the corpuscles on the decrease, as the case progresses. When the tubercles begin to soften, the quantity increases from 2 to 4½, the formation of vomicæ to 5½, and sometimes 6. We are not prepared to say what effect cod-liver oil may have, but in some cases it has been found to remove the fibrine. Its peculiar odour is distinctly perceptible in the solid contents of the blood on analysis.

The length and importance of the Report of the Meeting at the Hanover-square Rooms has compelled us to omit the letters of several valued correspondents, as also much of our usual matter.

ORIGINAL LECTURES.

LECTURES
ON
THE CHEMISTRY OF THE POISONS;
OR, ON
PRACTICAL TOXICOLOGY.

SHOWING THE APPLICATIONS OF CHEMISTRY TO THE DISCOVERY OF CRIME.

By H. LETHEBY, M.B., Lond:
Lecturer on Chemistry in the Medical College of the London Hospital.

LECTURE XVI.

Detection of Chlorides in the Urine; Orfila's Experiments thereon—Impurities contained in Muriatic Acid, and Modes of detecting them—(a) Sulphurous Acid, Pelletier's Test, Girardin's, Heintz's, Waekenroder's, Fordos' and Gelis', Lambert's, Savory's—(b) Sulphuric Acid—(c) Nitrous Acid and other Oxynitrogenous Compounds—(d) Free Chlorine—(e) Iodine and Bromine; Dr. Cantu's Test for—(f) Chloride of Arsenic.—Proportions detected by Waekenroder, Dupasquier, Wittstein, Reinsch, &c.—(g) Bichloride of Tin—(h) Chloride of Lead—(i) Chloride of Iron—(k) Fixed Salts—(l) Organic Matter—Modes of Purifying the Crude Acid—Lambert's Process—Duflos', Winckler's, Gregory's, Devergie's.

At the close of the last Lecture, gentlemen, we were discussing a very important Medico-legal fact; namely, that in all cases of poisoning by muriatic acid, a large portion of the chlorine enters the circulation, and is ultimately eliminated by the kidneys. Orfila attaches so much importance to this, that he has recorded it as one of the most constant of his experimental results. In his third observation on this poison, he says, "I have directly precipitated, by means of nitrate of silver, the urine collected from the bladders of nine healthy dogs; some of which had fasted for many hours, while others had taken both food and drink a short time before. The precipitate so obtained was washed, and treated with pure boiling nitric acid; it was then drenched with water until it had lost all acid re-action. The residue was dried at 212° Fahr., and weighed. By operating in this manner he obtained, from 3 grammes (46·3 grs.) of urine, the following proportions of this metallic chloride: in two instances, the urine yielded a centigramme (0·154 gr.) of it; in three cases, it gave a centigramme and 4 milligrammes (0·215 gr.); and, in the four other cases, it gave only 8 milligrammes (0·123 gr.) of the chloride. On the other hand, he noticed, that a similar quantity of urine, taken from the bladders of two dogs which had been poisoned with 12 grammes (185·26 grs.) of concentrated muriatic acid, mixed with 200 times its weight of water, yielded 8 centigrammes (1·232 grs.) of chloride; and the same quantity removed from the bladders of three other dogs which had not taken more than eight grammes (123·4 grs.) of the concentrated acid, dissolved in 250 parts of water furnished six centigrammes (0·924 gr.) of the chloride. From which we may gather that he obtained at least six times as much chloride of silver from the urine of the poisoned dogs as he did from that passed by the healthy animal. Other experiments exhibiting the very same results are also recorded by Orfila, in which the acid was either administered in a concentrated state, or else introduced into the cellular tissue of the animal, all of which indicate that the discovery of a large proportion of combined muriatic acid in the fluid excreted by the kidneys, is, to say the least of it, a very important medico-legal fact; and you may conclude, from Orfila's investigations, that it is your duty to seek for this compound in the urine in all cases of suspected poisoning by this acid.

We come now to the consideration of the last part of our subject, viz., that which relates to the impurities contained in muriatic acid, and to the manner in which they are to be recognised and removed. You will readily believe that this is a very important matter for consideration, when I tell you that it is almost impossible to obtain a sample of pure commercial acid, and that the impurities contained in it are numerous, occasionally poisonous, and always the source of perplexity and trouble.

IMPURITIES OF HYDROCHLORIC ACID.

The contaminations most frequently met with in the commercial acid are the following:—Sulphurous and sulphuric acids, certain oxides of nitrogen, chlorides of arsenic, tin, lead, and iron, bromine, iodine, organic matter, and various fixed salts. Most of these impurities are derived from the oil of vitriol employed in the manufacture of the acid, a few of them come from the salt made use of, and in one or two instances they are derived from the apparatus.

(a) *Sulphurous Acid.*—Almost every chemist, who has during the last fifty years had occasion to inquire into the purity of muriatic acid, has invariably detected a greater or less proportion of this contaminating agent in it; and no doubt it owes its origin either to the organic matters contained in the impure salt, or to the metal composing the body of the still, both of which will, at a high temperature, deoxydise sulphuric acid, and so produce the impurity in question. To judge from some analytical results, which have lately been made by Mr. Savory, of the Pharmaceutical Society, commercial spirits of salts may contain as much as 11 per cent. of sulphurous acid. It is important, therefore, that you should know how to recognise the impurity. Some of you may perhaps remember, the observations which were made on this compound when we were considering the impurities contained in ordinary sulphuric acid, for I then spoke of the disadvantages which were attendant on the presence of this impurity, and I showed you, moreover, how you were to proceed to detect it. But, as this subject is a very important one, I shall again allude to the facts which were then so fully discussed.

Sulphurous and hyposulphurous acids may be recognized in spirits of salts in various ways; for, to quote from a paper written by M. Heintz about five years since, I may state that Pelletier, in 1792, published a tolerably sensitive test for this acid. In 1835 this test was revived by Girardin, who showed that when crystals of protochloride of tin are immersed in a muriatic solution of sulphurous acid, the liquid soon becomes turbid, then yellow, and gradually lets fall a brownish precipitate, the change being dependent on the formation of sulphuret of tin. When, however, the muriatic solution contains only traces of sulphurous acid, the reactions are so weak that they cease to afford the indications in question. This has led Heintz to the employment of a more sensitive test. He takes a solution of protochloride of tin in muriatic acid, adds it to the liquid to be tested, and heats it to incipient boiling. This would produce decomposition, as Pelletier proved, if there were any quantity of sulphurous acid present; but if the proportion of this impurity is diminished to within a certain limit, there is no sulphuret of tin deposited; the liquid, however, smells of sulphuretted hydrogen, and acquires a faint yellowish tint, without becoming turbid. The smell, therefore, would indicate a smaller quantity of sulphurous acid than the precipitate. But since the smell might be concealed by the vapours of the hydrochloric acid, it is necessary to adopt some other means of detecting the odorous compound. This he accomplished by adding a few drops of any cupreous solution, say a sulphate, when a brown precipitate of sulphuret of copper is instantly thrown down. A solution of chloride of bismuth in muriatic acid may likewise be employed instead of the solution of sulphate of copper; but acetate of lead cannot be used for the purpose, because of its producing a white precipitate, chloride of lead, in place of a black one.

Heintz states that this reaction is not quite so certain, if the sulphate of copper is first added to the liquid into which some protochloride of tin has been conveyed, and the whole then heated; for in this case the protochloride first reduces the oxide of copper. If, therefore, more of the copper solution has been added to the liquid than can be converted into protoxide of copper by the protochloride tin present, there is none of the latter to convert the sulphurous acid into sulphuretted hydrogen, and you will consequently fail in your results.

Having made a careful examination of the process here sketched out, Waekenroder concludes that the mode of proceeding recommended by Heintz cannot insure any great accuracy; for on taking into consideration the re-actions of sulphuretted hydrogen towards metallic oxides, it is evident that, as recently precipitated sulphuret of tin is very soluble in strong muriatic acid, no yellow precipitate can be produced when there is a tolerable excess of this acid present, and although the copper test is capable of demonstrating the presence of a smaller quantity of sulphurous acid, yet even the precipitate of sulphuret copper is not wholly insoluble in concentrated hydrochloric acid. Waekenroder, therefore, proposes to adopt another modification of Pelletier's test. He takes the muriatic acid, and treats it with a tolerably large quantity of protochloride of tin in a test-glass. He then covers the glass with a piece of paper moistened at one spot with a little sugar of lead. Sulphuretted hydrogen is soon disengaged, and according to the quantity of this gas liberated will be the intensity of the dark stain on the paper. Waekenroder states that this test is preferable to the latter, not only because it is more delicate, but because it serves to determine the presence of every sulphur acid, except sulphuric.

A consideration of the re-actions which are brought about when protochloride of tin is added to impure muriatic acid, will show that metallic tin may be employed in lieu of this protochloride. And, to judge from Waekenroder's results, it would appear, that pure tin-foil, used in the way just mentioned, indicates still smaller traces of sulphurous acid, insomuch that almost every sample of commercial hydrochloric acid yields the vapour of sulphuretted hydrogen, when it is poured on this metal at ordinary temperatures.

Closely allied to the preceding, is the test recommended by Fordos and Gelis, who have shown, that sulphurous acid may be recognised by diluting the liquid with water, then adding it to pure granulated zinc, and passing the evolved gas through a solution of sugar of lead. As I have already demonstrated to you, the nascent hydrogen reduces the sulphurous acid, combines with its sulphur, and escapes as sulphuretted hydrogen. This gas communicates a dark tint to the lead salt, and gives a yellow ring of sulphur when it is passed through a red hot glass tube. The only precaution that is necessary, in conducting the two last experiments, is to avoid the use of a metal containing sulphur.

Lembert recognises the presence of sulphurous acid in spirits of salts, by first saturating the liquid with pure carbonate of potash, then adding a weak solution of starch, and a small quantity of an alkaline iodate, and after these have been well mixed, he carefully adds a little concentrated sulphuric acid. This liberates the sulphurous and iodic acids contained in the mixture; and as these mutually decompose each other, iodine is set free, and a blue colour is given to the starch. In performing this experiment, it is necessary to use the oil of vitriol in very small quantities, and not to add a second drop of the acid until you have ascertained that the preceding one has not produced the required tint. Lembert speaks in strong terms of this test; but I am of opinion that it is altogether worthless, not only because it is far from being a delicate, or rather, I should say, a very manageable one, but also because it is open to fallacy from the presence of iodides and other salts.

In the analyses of muriatic acid made by Mr. Savory, he determined the quantity of sulphurous acid present by first precipitating the liquid with a soluble salt of baryta, then filtering, evaporating the fluid to dryness, igniting the residue with saltpetre, and again testing it for a sulphate. So again, if the acid which has been freed from oil of vitriol by chloride of barium, yields a white precipitate when it is boiled with its own bulk of nitric acid; it indicates the presence of sulphurous acid by the formation of a new quantity of sulphate of baryta.

There are other tests for sulphurous acid in spirits of salts, as for example its decolorising action in the violet salts of manganese, and its yielding a yellowish-white precipitate of sulphur, when it is treated with sulphuretted hydrogen; none of these are, however, of much moment to you, and I leave this subject by saying, that Savory's test is, in my opinion, the most manageable, and Waekenroder's the most delicate.

(b) *Sulphuric Acid* is another very common impurity of muriatic. In this sample which I now place before you, there is as much as 3 per cent. of oil of vitriol contained in it; and, as you may here perceive, the impurity is recognised by diluting the acid with water, and then testing it with a soluble salt of baryta.

(c) *Nitrous Acid, or some other Oxide of Nitrogen*, is also said to be a frequent constituent of this acid. These compounds are easily discovered by employing protosulphate of iron, or green vitriol—a salt which, as I have already shown you, acquires a violet brown tint with the oxide of nitrogen.

(d) *Free Chlorine* is usually met with in conjunction with the last-named impurities, and they are both produced by the re-action of nitric acid on spirits of salts. An acid containing free chlorine, usually has a reddish-yellow tint, occasionally it evolves the odour of chlorine, and it has the faculty of dissolving small fragments of gold leaf. Moreover, the presence of chlorine in the liquid enables it to bleach a solution of indigo, and to precipitate a solution of sulphuretted hydrogen. Here is an acid which contains the impurity in question, and you will notice that it exhibits the last three characters in a very marked manner.

(e) *Iodine and Bromine* have likewise been detected in this acid. Dr. Pereira speaks of the existence of the latter impurity therein; and Mr. Proctor says that he has found iodine in several samples of crude muriatic acid. He has detected it by neutralizing the acid with sesquioxide of iron, and then suspending a piece of starched paper over the ferruginous liquid. In the course of a few hours he generally finds that the paper has acquired a blue colour from the action of free iodine. Very recently Dr. Cantu, the Professor of Chemistry in the University of Turin, has pointed out a very delicate means of recognizing the presence of these haloids in mineral substances, and I think his discoveries may be made available to our present purpose. The outline of his process is the following: he first saturates, or slightly supersaturates the acid with pure carbonate of potash, evaporates the product to hydrogen, and destroys any organic matter which may be present, by exposing it to a low red heat. A few drops of acetic acid are now to be added, in order to remove any excess of the carbonate. It is again evaporated to dryness, so as to expel the excess of acetic and carbonic acids, but not to char, as this would communicate a brown tint to the liquid, and so obscure the action of the test. At this point, the residuary matter is dissolved in the smallest possible quantity of pure water, and a few drops of a weak solution of starch added. This being done, a small portion of a test liquor, consisting of 10 parts of sulphuric acid and 1 of nitric, is to be placed in a glass with a narrow base; then the solution of the saline residue is to be poured very gently down the side of the glass, so as to rest on the test liquor without mixing with it. By operating in this manner, if iodides or bromides be present, there will quickly appear two zones in the saline solution, one of a clear topaz yellow colour, sometimes inclining to a green, and the other of a blue colour, floating in it. This re-action will point out to you the utter fallacy of M. Lembert's test for sulphurous acid.

Iodine and bromine owe their origin to the impurity of the common salt made use of in the manufacture of the acid, and I am inclined to think that they generally exist in the liquid in the form of soluble chlorides; for you will invariably find that the spirits of salts, containing these impurities, has a bleaching property, and therefore tells us of the existence of free chlorine, or of a halo-haloid.

(f) *Chloride of Arsenic* has been referred to by many chemists as a very common constituent of ordinary muriatic acid. This fact has lately commanded attention in consequence of the practice so frequently adopted, of making a light and, as it is termed, digestible, unfermented bread, with spirits of salts and carbonate of soda in lieu of yeast. Dr. Danberry, however, has referred to a case in which serious results followed from the use of this acid in the way mentioned, it being contaminated with a large quanity of arsenical chloride. Dr. Rees also states, that he has met with this poison in crude muriatic acid; and, on referring to the writings of Gmelin, I find that Wackenroder has detected as much as the 1-11934ths of metallic arsenic in this liquid; Dupasquier as much as the 1-1825th of the poison; Wittstein, the 1-770th; and Reinsch as large a quantity as the 1-609th. These proportions are equal to about one-third more of arsenious acid, and to rather better than double their weights of the chloride of this metal. The arsenic is no doubt derived from the oil of vitriol employed in the manufacture of the acid; and I have stated, on the authority of Dupasquier, that it exists in the liquid in the form of this very volatile chloride. Dupasquier, moreover, affirms that, when commercial hydrochloric acid, contaminated with arsenic, is heated in a retort connected with an empty tubulated receiver, from which a bent tube conveys the gas into water, the aqueous acid so obtained is still found to contain arsenic; and an acid contaminated with this impurity, yields arseniuretted hydrogen when it is poured on zinc, a property whereby the impurity is most readily detected. To demonstrate this fact to you, I shall take an arsenical acid, dilute it with four times its bulk of water, and add it to a few granules of pure zinc,—the evolved gas burns, as you see, with an arsenical flame; it deposits a white and a black stain on glass; it blackens a solution of nitrate of silver; and yields a steel-grey ring of metallic arsenic, or a yellowish red one of the mixed sulphuret, when it is decomposed, as it traverses a red-hot glass tube. By acting in a similar manner, the acid produces a brown film on mercury; and if it be diluted with water, and then treated with sulphuretted hydrogen, it deposits a copious yellow precipitate of orpiment. I may here remark, in the words of Gmelin, that, if the arsenic be precipitated by sulphuretted hydrogen, and the acid distilled without previously removing the orpiment, the distillate is sure to contain arsenic, in consequence of the sulphuret being again decomposed by the boiling concentrated acid. So, again, you may discover the presence of this impurity in hydrochloric acid, by mixing the liquid with half its bulk of nitric acid, and evaporating it to dryness, when, if the poison be present, it will remain as involatile arsenic acid, a substance which has the power of producing a brick-dust red precipitate, with a solution of ammoniacal nitrate of silver. Lastly, arsenic may, according to Reinsch, be detected in the acid, and removed from it, by means of a strip or two of clean copper, which, on being heated with the liquid, acquires a steel-grey film of metallic arsenic; the copper thus coated, furnishes a white sparkling sublimate of arsenious acid, when it is heated in an open test-tube.

(g) *Bichloride of Tin* is mentioned by Gmelin and others among the impurities of this liquid. In fact, Gmelin states that it is derived from the oil of vitriol, and that it passes over into the first condensing bottle when the sulphuric acid contains binoxide of tin. Hydrochloric acid, which contains this impurity, gives a yellow precipitate with hydrosulphuric acid; after some days, however, this precipitate collects, as you have just witnessed, and produces a brown deposit of the metallic sulphuret. According to Berzelius, the sulphuret thus formed yields a globule of tin, when it is heated with soda before the blow-pipe; and a white powder, peroxide of tin, when it is acted on by strong nitric acid.

(h) *Chloride of Lead* was found by Vogel in what appeared to be a very pure sample of muriatic acid. He noticed, that when the acid containing this impurity was diluted with water, it slowly deposited white sparkling leaflets of chloride of lead. Treated with an excess of sulphuretted hydrogen, the acid furnished a copious precipitate of sulphuret of lead. At first this precipitate had a brown-red colour, but by employing a large quantity of the precipitant, it ultimately assumed its normal black tint. Sulphuric acid gave a white precipitate of sulphate of lead; and on evaporating a known weight of the impure acid to dryness, Vogel ascertained that it was contaminated with as much as 1 per cent. of the metallic chloride. The presence of this salt in hydrochloric acid is easily accounted for, when we consider that in many manufactories the distillation of the acid is effected in leaden vessels, and that the liquid itself often contains free chlorine.

(i) *Chloride of Iron* is considered by many to be a frequent cause of the deep yellow colour of crude muriatic acid. Rose and Graham have referred to this fact, and most of our English chemists have also spoken of the existence of iron in the impure acid. I do not think, however, that this metal is often present in very large proportion; and I shall quote the analysis made by Mr. Savory in order to illustrate this and some other points connected with the sophistication of hydrochloric acid. His experiments were made on three samples of the acid, and they were found to have the following composition:—

	No. 1. Sp. Gr. 1166	No. 2. Sp. Gr. 1164	No. 3. Sp. Gr. 1163
Free Hydrochloric Acid	29·93	28·73	31·371
Sulphurous Acid	10·85	8·41	7·053
Sulphuric Acid	·15	·16	·074
Perchloride of Iron	·84	·05	·005
Water	58·23	62·65	61·497
	100·00	100·00	100·000

Chloride of iron may be recognised by neutralizing the acid with carbonate of soda, and then testing it with tincture of galls or prussiate of potash; the former of which gives a violet tint and the latter a blue; or the impurity may be separated by supersaturating the liquid with ammonia and collecting the red peroxyde of the metal.

(k) *Again the Chlorides of Sodium, Potassium, Calcium, and other fixed Metallic Substances*, may, and do often, exist in commercial muriatic acid. Fortunately, however, these substances are easily detected by carefully evaporating the acid to dryness and then searching for the saline residue.

(l) Lastly muriatic acid almost always contains a greater or less proportion of *organic matter*. It is this, in my opinion, which generally gives colour to the acid; and so far it is an objectionable impurity. By way of illustrating the truth of this, I will direct your attention to an acid, which was, a few days since, pure and colourless; it now has a deep orange tint in consequence of its having acted on a very small portion of cork. I may, moreover, remark to you, that a mere trace of organic matter; as, for example, a minute fragment of luting, or a few particles of dust, will communicate a distinct colour to the otherwise pure acid. This contaminating agent may be recognised by evaporating the acid to dryness, and then charring the residue.

MODES OF PURIFYING THE COMMERCIAL ACID.

Several methods have, from time to time, been proposed for the rectification of hydrochloric acid; and, although it is my duty to refer to the most important of them; yet I shall do so but briefly, because I believe that it is at all times much easier to manufacture a good acid than it is to purify a bad one.

Lembert states that his process is a cheap one, and that it requires but little time for its operation; but you shall judge of this for yourselves. If, says Lembert, the acid to be purified contain sulphurous acid, which is most commonly the case, I add to it a little binoxide of manganese, the oxygen of which converts the sulphurous acid into sulphuric. But as it is almost impossible to avoid the formation of a little chlorine, I add to it a small quantity of protochloride of iron, or a few iron turnings, either of which will absorb the free chlorine. I then put a certain quantity of the acid so operated on into a tubulated retort; adapt a funnel to the tubulure, and to the beak a Woulfe's apparatus, all the bottles of which, except the first, contain distilled water, and are surrounded with cold water. The apparatus being thus arranged, sulphuric acid is poured through the funnel into the retort. By this means hydrochloric acid gas is disengaged, and passing over it, is seized by the water in the Woulfe's bottles. When about double the bulk of oil vitriol, as compared with that of the hydrochloric acid, has been poured into the retort, he gradually raises the mixture to the boiling point, and then stops the operation. Lembert states that the product is pure muriatic acid. But I need scarcely tell you, that if the original acid contain arsenic, this impurity will also be found in the distilled product, and hence the operation is an imperfect one. Reinsch, however, states that the arsenic may be got rid of by redistilling the acid over a few strips of clean copper. Duflos recommends us to dilute the acid with one-third of its bulk of water; then to add a small quantity of proto-sulphate of iron, in order to get rid of chlorine and the oxides of nitrogen; and, after allowing the mixture to stand exposed to the air for some time, to pour off the clear liquor, and to distil

it somewhat short of dryness, at a moderate heat, rejecting the first fourth of the operation as being impure. MM. Hensler and Riegel have tried this method, and they report, that it yields an acid which is clear, colourless, and perfectly pure. Devergie also states, that he has made many experiments with arsenical muriatic acid, and has always found, that this mineral comes over with the first portions of the distillate. This, therefore, may be regarded as the best method of purifying the crude acid. In my opinion, however, it is easier to manufacture the acid for yourselves; and you may do so by following one of two processes.

Winkler's Process.—Introduce 24 parts, by weight, of pure and perfectly dry chloride of sodium into a large tubulated retort, and then cautiously add a cold mixture, consisting of 44 parts of strong sulphuric acid, diluted with 300 of water. A long, rectangularly bent glass tube is now to be fitted to the beak of the retort, and the other extremity of the tube plunged into a bottle containing 20 parts of cold distilled water. This being accompliahed, the mixture in the retort is to be distilled until ebullition ceases. If the operation has been well performed, the hydrochloric acid amounts to 44 parts, has a density of 1144, and contains 30 per cent. of anhydrous acid.

Dr. Gregory's process is a little different from the preceding, and it is, I think, a little more manageable. He advises us to take a common Florence flask, and to introduce into it four ounces of the purest patent salt, and five fluid ounces of pure sulphuric acid, the density of which ought to be about 1000. Apply a gentle heat to the mixture, and conduct the gas, by means of a bent tube, into a four-ounce phial, containing two ounces of distilled water, surrounded with snow or ice-cold water. No safety-tube is required, as the tube is made to dip only about one-eighth of an inch into the water; so that, should any absorption take place, the rise of a little water in the tube exposes the extremity of it, and admits atmospheric air; or, for greater security, a small bulb may be blown in the descending limb of the tube. The gas is absorbed as fast as it comes over, and for the first hour and a quarter the heat need not be increased. If the temperature of the surrounding water has been kept so low as 50°, the two ounces of the distilled water will have increased in volume to three, and there will have been produced a fuming, colourless acid, having the density of 1200 or 1210. This portion of acid being removed, its place is supplied by another two ounces of distilled water, and the heat is gradually increased and continued for another hour; by that time, all the hydrochloric acid is expelled from the flask, and the second two ounces of water have become three ounces of pure acid, having a density of 1100. If five fluid ounces of water are at once used for condensing the acid, and kept till the distillation is at an end, 7·5 fluid ounces of pure acid are obtained, having a density of 1155, and containing about 31 per cent. of acid.

In my own experiments, I have found that it is better to adapt a long funnel to the cork of the flask, and to add the acid in successive portions. It is advisable, moreover, to use a small Woulfe's bottle, or phial, containing a drachm or so of water, as the first receptacle for the vapour before it passes on into the water where it is to be condensed. By adopting this contrivance, you will guard against the presence of a little oil of vitriol, or of traces of arsenic, which may come over during the distillation.

With so ready a means of manufacturing a pure and good acid, I do not think, as I said before, that you would be tempted to rectify a bad one.

ORIGINAL CONTRIBUTIONS.

ON THE FUNGOID AND ANIMALCULAR THEORIES OF EPIDEMIC DISEASES.

By PH. B. AYRES, M.D., Lond.
Professor of Toxicology to the Royal Medico-Botanical Society of London.

On no one medical subject have there been greater discussion and diversity of opinion than on the true cause and communicability of epidemic diseases; nor can we feel surprise at these differences of opinion when we revert to the real obscurity in which the whole theory of epidemic and communicable diseases is at present involved. The hypotheses now received with most favour are three in number. One of these, and, to my mind, the most probable, attributes the production of epidemic affections to the reception into the blood of a substance in a state of molecular motion, which possesses the power of inducing a similar molecular motion in the fluids of the recipients, whereby the special epidemic affection is produced, such substance being either the product of a previously infected subject, as in typhus, or of the decomposition of animal or vegetable matters, as in marsh miasmata.

A second hypothesis attributes the production of epidemic disease to the reception into the body, and even into the blood, of some of the minute forms of animal life, some species of infusorial animals.

The third hypothesis lately advocated by an American physician, Dr. Mitchell, attributes the origin of epidemic diseases to the reception into the body, and even into the blood, of the spores of some one or other of the minute fungi; and this hypothesis appears to be borne out by the observations of Drs. Brittan, Swayne, and Budd, of Bristol. I need not say that so plausible an hypothesis, supported by the most ingenious arguments and positive observations, must undergo a severe examination, before it can be admitted to rank as a theory or logical induction from facts.

Having premised this brief statement of the hypotheses at present in vogue, I proceed to lay before the Society some observations which appear to me to be fatal alike to the animalcular and fungoid hypotheses.

In the first place, then, it must be evident that none of the ordinary species of animalculi or of fungi can give rise to an epidemic disease on its first visit to a particular country or locality; or to the same locality at widely distant periods; since these fungi are annually developed in greater or less abundance. It cannot for a moment be admitted that any of the common species of mucor, bothrytis, penicillum aspergillus, &c., which are at all times so extensively distributed where sufficient moisture is present, as to be almost ubiquitous, are capable of producing a disease like cholera, which, in its truly epidemic character, has visited this country only twice within the memory of man; although many seasons have been favourable to the most extensive production and propagation of these fungi. Nor do any observations exist which go to show that the reception of the spores of these fungi produces symptoms of fever or of cholera. It seems, then, to be requisite to the establishment of the fungoid hypothesis, that its advocates should be able to demonstrate that some new form of fungoid life be present and prevalent during the advent of epidemic cholera; for it cannot be consistently affirmed, that one and the same species of fungus should be capable of producing such diverse symptoms as those of ague, cholera, and typhus. Had such a new fungus been discovered during the recent prevalence of cholera in England, a high degree of probability must have been conceded to the fungoid hypothesis; but, no such thing has been described, save and except the cells and granules figured by the Bristol pathologists. There is great room for doubt, as to the real nature of the rings, cells, &c., found in the evacuations of cholera patients. Personally, I am of opinion, that none of the bodies figured by Drs. Brittan and Swayne are the spores of fungi; for, although I have carefully studied this particular class of plants, and subjected a large proportion of the British species to microscopic examination, I have never seen sporules of fungi bearing even the most remote resemblance to the figures published some months since in the Medical Journals. Even if we admit the bodies described by Drs. Swayne and Brittan to be the sporules of fungi, it is still necessary, for the establishment of the fungoid hypothesis, that the fungi themselves should exist in their fully developed state, either in or out of the body of the patient in their peculiar and characteristic form. We cannot rationally expect an indefinite and multitudinous reproduction of spores, without some of these spores finding a fitting nidus, and going on to perfect development. Yet, no new and perfectly developed fungus has been discovered in those localities in which cholera has committed its most extensive ravages.

As the upholders of the fungoid hypothesis have not been able to name the order, genus, or species of fungus, by which they believe epidemic diseases to be propagated, I may have been in error in citing the mucors as an example. The same line of argument is, however, applicable to all the other orders. If we take some species of uredo or puccinia as the efficient cause of the epidemic, it must be shown that these have been more than ordinarily abundant, or that some new species has been discovered. But the difficulty is much greater if the higher forms of fungi be taken, —the agarici, for example. Were the spores of the agarici the cause of all the mischief, then the fields, nay, the damp parts of the houses must have exhibited countless multitudes of mushrooms,—forms of vegetable life not likely to be overlooked.

But the fact is, that we are constantly inhaling or swallowing the sporules of fungi. That such are constantly floating in the atmosphere is demonstrated by their occasional development on the damp surfaces of mineral bodies, such as glass, which cannot be supposed to contain them. The rapid development of *fungi* on damp organic substances, in all situations, serves to demonstrate, that the spores are actually contained in the vegetable substance itself; and this is rendered still more certain in the case of the uredos and puccinias—the smut and rust of corn, which can be prevented by treating the seed-corn with some substance,—arsenic or sulphate of copper, for example,—possessing the power of destroying the sporules. The foregoing remarks tend to prove, that none of the ordinary forms of fungi are capable of producing even the common fevers of the climate or country, much less a new and peculiar disease. One observer, who has written in one of the numbers of the *Lancet* on this subject, supposes that he has traced the further development of the so-called cholera fungus in the urine of a cholera patient, and may, perchance, at this time, be carefully cultivating this noxious vegetable! He has even had the hardihood to give a new name to what he might have seen in any vegetable infusion, which has been kept for some time in a moderate temperature—the mycelium of some common species of mucor, with certainly no distinctive character! If he had taken a weak solution of moist sugar, introduced a little yeast into it, and kept it in a warm place, he would have been gratified by finding an abundant crop of his cholera fungus! If, again, typhus is to be attributed to any of the more common forms of mucor or other minute fungoid vegetation, then, assuredly, typhus should be most prevalent where these mucorinæ are most developed. An unfortunate farmer's servant, who shakes up a quantity of mouldy hay should be the victim of one or other of the epidemic diseases.

I know not whether the advocates of the fungoid hypothesis attribute the spread of those clearly contagious or infectious diseases—small-pox, cow-pox, and itch, to fungi—as no mention is made of these diseases. If such be the case, I would ask, who has seen the sporules of fungi in the fluid of the vesicles of either of these diseases, or, what would be much more interesting, the fully developed fungus?

As I have demonstrated, in an earlier part of this paper, that the sporules of fungi are both inhaled and swallowed with the air and food, it would not be surprising should some sporules be really found in the evacuations; but it is clear, that, under such circumstances, it would amount to absurdity to attribute the occurrence of the disease to the presence of bodies which are constantly entering the alimentary canal. If, again, the sporules of the mucors were capable of engendering disease, then ought yeast to be accounted one of the most deadly poisons, consisting, as it does, of a fluid absolutely charged with the sporules of one of the common forms of mucor. A reference to Turpin's memoir on the development of the yeast-plant, in the Memoirs of the Paris Academy of Sciences, will convince any unbiassed mind, that the yeast globule, after passing through a series of transitional states similar to those figured in the *Lancet* as the development of the cholera fungus, ends in the formation of the penicillum glaucum.

If, in the preceding hurried observations, I have not succeeded in convincing the members of the Society now present, that the fungoid hypothesis rests on no certain or even probable basis, I have at least opened up a field for an interesting discussion.

6, Upper Portland-place, Wandsworth-road.

CASE OF INTUS-SUSCEPTION—FOUR-AND-A-HALF FEET OF INTESTINE PASSED PER ANUM.

By ROBERT A. SHELDON, M.D., Raphoe.

I take the liberty of forwarding to the *Medical Times* the account of a case of intus-susception, which I am happy to state has terminated favourably under my treatment. The patient is now completely recovered, and I think the case will not be void of interest to the Medical Profession, as it was attended with extraordinary results, my patient having passed per anum, 4½ feet of his intestine, which I have in a state of preservation in spirits; the adhesive inflammation having, in my opinion, set in, and union taken place at the upper part, where the intus-suscepted part commenced, while mortification was in progress in the intus-suscepted part, and so the continuity of the intestinal canal was secured, and when the part was thrown off it was carried on through the lower part of the intestinal canal. The man's name is Michael M'Laughtan, a native of Raphoe, aged 63; he is a farm-labourer. He was attacked, on the 4th March inst., with violent spasms and pain in the epigastric and umbilical region, with the feeling as if the bowels were drawn towards the spine with a sharp cord, with violent vomiting and frequent desire to go to stool, but without being able to pass anything; pulse 96, and weak. Gave him laudanum 45 drops; sp. lavandal com., ʒii., in on ounce of peppermint water, which made the vomiting less frequent. I then gave ol. recini, ʒi.; ol. croton tig., iii. gt.; and in two hours after passed a flexible tube up the bowel, as far as it would reach to the tigmoid flexure of the colon, and injected an enema of strong soap solution, to the amount of three quarts, which brought away a large quantity of grumous blood, mixed with hardened fæces; had a mustard cataplasm applied over the bowels.

On the 5th, pulse 86, and rather firmer, administered an enema as formerly, adding to it sp. turpentine, ʒii.; and ol. olive, ʒiv.; repeated the mustard cataplasm. The lower part of the bowels were greatly relieved, but the pain continued in the epigastric region. In the evening administered another enema.

6th.—Pulse 80, tongue clean, vomiting less frequent; pain in the epigastrium continuing, but not so severe. Gave the following linament to rub over tha stomach and bowels:—Ol. terabynth, ʒi.; tinct. opii., ʒss.; ol. croton tig., ʒss.; and rubbed till there was a perfect eruption over all the parts in three hours.

7th.—Pulse 82, firmer and stronger. Gave him ol. recini, ʒi.; tinct. opii., gt. xx.; ol. croton tig. gt. ii. on an ounce of peppermint water, and in four hours after repeated the enema; the bowels were freely acted on, and in the evening all the symptoms greatly relieved.

8th.—Pulse 78; tongue clean. Gave him a glass of decoct. cunchonæ every sixth hour, and continued giving him enemata, in as large quantity each time as the bowels would receive. Every day up to the 11th inst., even after rising from stooling, he found the bowel hanging from him, and getting hold of it, pulled at it, and with some difficulty got it brought away. He is now so far recovered that he has been working with some potatoes in his garden. He complains of nothing but a coldness in the left epigastric region.

March 27th, 1850.

CHLOROFORM IN NEURALGIC AFFECTIONS.

By C. B. BARRON, Esq., M.R.C.S.L.

That ether, and subsequently chloroform, since their discovery, have been amongst the greatest boons to the Profession and the public at large, no one will deny; nor that the nineteenth century will hold a lasting fame in the history of Medicine, replete as it is with interesting discoveries at home and abroad. As the inhalation of these anæsthetics (but more particularly chloroform) will produce such phenomena as experience confirms I see no reason why we should not expect to find they will alleviate pain, applied externally, as will opium, hydrocyanic acid, &c.

I am not aware that the attention of the Profession has hitherto been called to chloroform as an external application in the treatment of various neuralgic affections. Perhaps these few remarks may not be out of place. As a remedial agent in the treatment of facial neuralgia and tic-douloureux, I would wish to bring chloroform more under the notice of the Profession generally; and in the treatment of which, I am convinced it will be, in the hands of a judicious man, a great auxiliary. The following is a case in point:—

Miss E. S., a delicate young lady of nervo-lymphatic temperament, had been suffering from facial neuralgia for several days when I was called in to see her. The pain was excruciating, occupying the track of the temporal and facial branches of the right facial nerve. It was somewhat of an intermittent character, and throbbing, but for the most part continuous. As I considered it depended upon the aneuric condition of the patient, I ordered tonics, and she took the citrate of quinine and iron, &c., but without any impression being made upon the disease. I was at last determined to try the application of chloroform, taking care there should be none of it respired, by covering the mouth and nostrils with a pocket-handkerchief. I dropped a few drops upon a fine linen cloth, and applied it to the part. In this way about thirty drops were used, the effect of which was an almost instantaneous relief. The patient complained of a stinging, burning pain during its application, and for a moment could not bear it; but this passed off, and she has not had the slightest return of it since. She certainly continued her tonic treatment for some time. Such was the marked relief, that the patient entreated to have a few drops left her if it should return. The treatment of this case was obvious enough, and though it is clear that ferruginous tonics, generally speaking, exercise great control over this painful complaint, still we are often doomed to disappointment, and find them fail us. Frequently at the first onset, before we can bring the system to feel the remedies we use, we are too glad to turn to anything that will alleviate the suffering of our patient; and as opiates may be objectionable or injurious, to have anything likely to relieve is a desideratum not to be lost sight of.

I would introduce this subject for the consideration of the profession, and as our eminent brethren attached to public hospitals have a more extensive field for testing the merits of remedies than a private practice can afford, we must look to them in a great measure for the advancement of our Profession, and the establishment of facts; and to confirm this is certainly within their province. Let experience decide. Chloroform being a dangerous remedy in the hands of the inexperienced, it will at all times have to be used under the immediate eye of one accustomed to its exhibition, or melancholy results may be anticipated; but in the hands of one who is acquainted with its disposition, it is as controllable, if not more so, than opium, or any other of our narcotics or soporifics, and may be applied externally without any risk whatever.

Southport, April 1850.

DENTAL PATHOLOGY.

By C. STOKES, Esq., M.R.C.S.L.

The following case occurred recently in my practice, and it appears to me to be interesting, as illustrating a fact in dental pathology, capable, I believe, of being directed, in many cases, to a practical result.

Colonel M. consulted me, in the early part of the present month, for a severe attack of toothache, the seat of the pain being in an upper cuspidatus, which had been plugged by a dentist in Liverpool some ten days prior to his visit to me. From the statement which my patient made relative to the condition of the tooth before it was plugged, I was led to infer, that the pulp cavity was open, and that the peculiar secretion, which is frequently present in an advanced stage of caries, was retained in the pulp cavity by the plug, producing the severe pain under which my patient suffered.

It occurred to me, that if I could secure an exit for this secretion without at the same time disturbing the integrity of the plug, my patient would be relieved, and the benefit of the plug, which appeared well and faithfully done, would be retained.

Acting upon this impression, I drilled a small opening with a moderately fine broach, through the centre of the plug, which was no sooner accomplished than the patient expressed himself greatly relieved. I was gratified by observing, that I had insured a free passage for the secretion, which was apparent on the surface of the plug; and also could be detected by its odour.

In a few days the pain in the tooth entirely subsided, and, up to the present date, no recurrence of the pain has taken place.

The practical deduction which is to be made from this case, therefore, is this, that in cases of dental caries, in which the discharge peculiar to a certain stage of the affection, continues unchecked by the usual remedies, we may advantageously plug a tooth with every prospect of saving it, provided we secure a free exit for the discharge.

Brook-street, Hanover-square, April 13, 1850.

HOSPITAL REPORTS.

UNIVERSITY COLLEGE HOSPITAL.

SCIRRHUS OF THE TONGUE—OPERATION.

The patient, a slender and pale-looking, but not unhealthy female, aged 27, has been married for some years. Her children are healthy. She has not had any constitutional disease which would account for the present state of her tongue, but her teeth have long been troublesome, becoming decayed, and snapping off one after another. About two years ago the tongue became sore, apparently from the irritation of decayed teeth. From this period the disease existing in the tongue is most probably to be dated, for the patient speaks of "a substance" having been in the situation of the present ulcer since then. In January last, the sore having advanced to about half its present size, she applied for advice to Mr. Lawford, and, notwithstanding judicious management by this surgeon, who removed the decayed teeth, applied nitrate of silver to the ulcer, &c., the disease continued to make progress. Its condition before the operation was as follows:—

From the left side of the tongue there projected an indurated mass, separated above by a groove from the edge of the organ. It extended about two inches in length, and an inch and half in breadth, and was deeply ulcerated on the surface. The substance of the tongue was hardened to some depth under the base of the projecting mass.

No pain was felt, except when the patient spoke, or when the diseased part was pressed upon. The lymphatic glands of the neck were in a natural state, and the general health, as far as could be ascertained, as good as it had ever been.

As the operation adopted in this case was likewise performed a few months ago by Mr. Quain for similar disease in another female, and seemed to have been executed with great facility, in addition to being quite effectual for the removal of the local disorder, the plan pursued will be stated with some detail.

1. The patient being under the influence of chloroform, a wedge was placed between the jaws in the situation of the molar teeth (which were wanting) on the sound side of the mouth. The wedge was not permitted to project from the mouth, the object of this precaution being, that the commissure of the lips might be drawn without hindrance to the opposite side, so as to allow the freest possible access to the diseased part of the tongue. A wire, bent at first forwards beneath the cheek, and again backwards outside the mouth, retained the wedge (which was of wood) in its posi-

tion. So constructed, the wire allowed the commissure of the lips to be drawn uninterruptedly to the opposite side.

2. A ligature was passed through the tongue near its point; and this, in the hand of an assistant, who had also charge of the apparatus for keeping the mouth open, served to draw the tongue forward, as well as to incline it to the sound side. By this contrivance the disease was brought as completely as possible within the reach of the operator.

3. In consequence of the difficulty of passing ligatures through the tongue with the ordinary hafted-needle, especially towards the back part of the mouth, a needle of a different form was constructed for the occasion. About two inches of the end of this instrument is bent nearly at a right angle with the rest; and this smaller portion is curved upon the flat, so as to sweep well around the base of the tumour. With this construction the handle of the instrument, when in use, is parallel with the upper surface of the tongue, while its points is passed through the organ. A special needle is required for the operation on each side, as it is best to pass the ligatures in each case from above.

4. The ligatures were all formed from a single long cord, parts of which were drawn in loops, at intervals from the dorsum of the tongue downwards. The loops, when drawn to a sufficient length, were cut below the tongue, and the ligatures constructed from them were tied beneath the diseased mass and well clear of it. The cord used in one of the cases being too thick for the eye of the needle, this expedient was resorted too; viz., a loop of thread, five or six inches long, was passed with the needle, and, by means of it, the thicker cord was conveyed into its position. Two loops of cord (making three ligatures) were, in the present instance, enough to circumscribe the tumour; three were required in the former case.

5. Lastly, the ligatures having been drawn as tightly as possible, in order to strangulate the diseased mass, were tied with the fingers. So, likewise, were they in the case before operated on, although the disease extended nearly to the pillar of the fauces. An apparatus had been provided to facilitate this important step of the operation, in case difficulty had been experienced in effecting it in the simplest way.

In the case now in the Hospital, the part included by the ligatures separated to-day, April 9, exactly a week from the operation, and it has left a healthy-looking surface. The side of the tongue is indented, over a considerable space, to the depth of more than half an inch. The patient has suffered very little. She has no pain, and she states herself to be quite well.

ENCYSTED TUMOUR OF THE NECK—OPERATION.

The patient, S. G., a female, aged 36, noticed, about fifteen years ago, a little tumour, the size of a pea, below the base of the lower maxilla, and a little before the angle of the bone. It remained stationary for eight or nine years, then increased slowly till six months since, when its growth became more rapid. Now the tumour is of the size of a pigeon's egg; it is not painful; is moveable, though not distinctly so.

Mr. Quain transfixed the tumour with a scalpel, and divided it with the integuments in cutting outwards. He then drew away the sac with a pair of forceps.

The contents of the sac, which was a thin one, proved to be, for the most part, atheromatous matter; but it contained likewise a considerable quantity of serum. Some of this fluid escaped during the operation; and, when an exploring needle was introduced before the operation, fluid of the same kind rapidly flowed along the groove of the instrument.

CASES SIMULATING STRANGULATED INGUINAL HERNIA.

Two cases of this kind have lately left the hospital.

H. G., aged 19, had been suffering for three days with vomiting, constipation, pain over the abdomen, increased by pressure, especially towards the right inguinal region. The preceding symptoms accompany an enlargement in the scrotum and inguinal canal, on the right side. The patient took, before his admission into the hospital, some active purgative medicine, but without any beneficial effect.

The enlargement in the inguinal canal and in the scrotum, taken together, gave exactly the appearance of an ordinary scrotal hernia; and the constitutional derangement was of that kind which attends upon the same disease. To this it should be added, as tending to the same conclusion respecting the nature of the disease, that the swelling, as far as can be ascertained, came on suddenly. The patient states positively, that there was no tumour till the present illness, which began three days ago. Notwithstanding, however, the suspicious circumstances, Mr. Quain came to the conclusion, that it was not a case of hernia. The analysis of the local appearances, by which the conclusion was arrived at, was given thus:—

The scrotal tumour feels light. The solid contents seem to be less than if the tumour were a rupture. The testis is not to be felt, but a slight hardness, or indication of hardness, is distinguishable at the back part of the mass. With a candle a degree of translucency is indistinctly perceived in a small part of the tumour. The inference from these facts was, that the scrotal portion of the enlargement was a small hydrocele.

As regards the enlargement above the scrotum, the swelling in the inguinal canal was, it may be observed, so well marked, that when the bed-clothes were removed from the patient there was noticed at once the appearance of an inguinal hernia.

But, to continue the analysis of the local phenomena as given at the time, when the part between the scrotum and the external abdominal ring is firmly grasped, the contents are separable one from the other under the pressure of the fingers, and they consist of one hard cord of the thickness of a finger, with some smaller ones, doubtless the vessels of the testis. In the inguinal enlargement the same impression is communicated to the touch, but much less distinctly, the form of the parts being here masked by the tendon of the external oblique muscle. In both situations there is, moreover, a want of the peculiar feel of a hernial tumour. The whole of the swelling above the scrotum is determined to be due to a very unusual degree of thickening of the vas deferens; and to the morbid alteration of this part, most probably, is the constitutional disturbance to be assigned.

This conclusion respecting the seat of the disease being arrived at, the condition of the urethra was looked to, and no puriform or other unnatural discharge was discovered. The patient, moreover, states distinctly, that he has never suffered from a discharge or irritation of any kind in this canal, and that he sustained no injury in the groin.

It is worthy of remark, that, notwithstanding the suddenness and recent growth of the morbid change, and the severity of the constitutional disturbance, the firm pressure of the parts, made for the purpose of the diagnosis, gave rise to no pain, and was not at all complained of by the patient.

The swelling and induration in the inguinal canal gradually subsided, and the constitutional disturbance disappeared under the use of opium with calomel and purgative enemata after leeches had been applied. Before the patient left the hospital, Mr. Quain emptied the tunica vaginalis testis of some high-coloured serum, with a small canula and trocar.

The second case, that of H. Newell, resembled the preceding in some of the most material circumstances, but differed from it notably in others. For whereas, in the instance above detailed, the swelling was entirely due to the augmentation in the size of the vas deferens, there were, in the present case, two enlargements. The note in the case-book of the result of the examination by Mr. Quain is as follows:—"Right testis is higher than the left. From its upper end is continued a hard, elongated body of about the thickness of two fingers; and higher up, close to the abdomen, the mass separates into two parts, both of which are equally unyielding, being even hard to the touch, wholly devoid of the elasticity of intestine and the flaccid feel of omentum. One of these thickened cords is regarded as the vas deferens; and inasmuch as the blood-vessels are not distinguishable, the second cord is looked upon as the aggregate of these, agglutinated together by plastic matter, the product of more or less recent inflammatory action."

In this, as in the former instance, firm pressure upon the diseased part caused little or no pain or uneasiness. The symptoms, except the vomiting, were less urgent. The case, too, yielded to treatment of the kind above noticed. It should be mentioned, that, in proportion as the disease subsided, the testis ascended towards the external abdominal ring, and ultimately entered partly within this opening,—the position the gland probably occupied before the present attack. But direct evidence upon this, as to its previous position, (as well as, indeed, respecting the history of the case before the admission into the hospital,) is wanting, in consequence of the lack of intelligence in the patient.

FISTULOUS OPENING BETWEEN THE VAS DEFERENS AND THE COLON.

When commenting upon the foregoing cases, in his Clinical Lecture, Mr. Quain alluded to the possible effect which the vas deferens, when inflamed, might exercise upon organs in contact with it. He at the same time exhibited a preparation, in which the excretory duct in question being much enlarged in every way, both in the thickness of its walls and the size of its cavity, a free communication was established between its interior and that of the sigmoid flexure of the colon, near the internal abdominal ring. The person in whose body this morbid condition was found, died of phthisis, under the care of Dr. Walsh.

KING'S COLLEGE HOSPITAL.

Among other operations on last Saturday, was one by Mr. Fergusson, for the removal of the hand and lower part of the fore-arm, by the usual double-flap operation. The patient was an old man of whom, in some observations which he subsequently made, Mr. Fergusson gave the following history. He had been admitted into the hospital at the beginning of last winter, with malignant ulceration on the back of the hand, which appeared to involve merely the superficial tissues. Taking this into consideration, with the man's good state of health, and the absence of the disease from other parts of the body, as indeed generally happens in this form of malignant disease, it was thought a fitting case for simple excision, which was accordingly done. For some time afterwards the wound formed healed kindly; but then gradually re-assumed its malignant aspect, and commenced spreading. His health not being very good at the time, he was sent into the country. He had just returned, much improved in health; the ulceration, however, extending over the chief part of the back of the hand, left no alternative but the removal of the limb. It was necessary to be very cautious about such an operation in a man of his advanced age, though not unfrequently they recover remarkably well.

DIVISION OF URETHRAL STRICTURE BY MR. PARTRIDGE.

We have this week the opportunity of presenting to our readers the outlines of two cases of stricture of the urethra, upon whom its division was practised. They are interesting at the present time, as some of our surgical authorities are opposed to the proceeding. It is our intention to give some account of other cases we have witnessed during the past year, previous to our making any remarks on the subject, premising only, that we have seen it followed by very beneficial results.

The subject of the present history, aged 30, of temperate habits, was admitted into King's College Hospital towards the end of last December, with an abscess in the perinæum, which had made its appearance three days previously. Eight years ago he had stricture consequent on gonorrhœa. The stricture was dilated, and, as he says, cured by the use of bougies. It, however, returned two months before his admission, accompanied with retention. A catheter was passed, which relieved him, but caused severe pain and some hæmorrhage. When Mr. Partridge examined him, he found a hard, inflamed, and deep-seated abscess in the perinæum, which, pressed on the urethra and only allowed the urine to flow in drops, with pain and uneasiness. The scrotum was tender and œdematous. Relief was afforded by frequent fomentations and morphia

given internally, and the abscess was opened in a few days. There was a free discharge, and he could afterwards pass the water in a small stream. On Feb. 6, the symptoms again became severe, but were relieved for a time by the opening of two or three irregular sinuses. No instrument could, however, be passed up to the 16th, when Mr. Partridge determined to operate. The principal stricture was situated just behind the bulb. The catheter was introduced into the bladder with some difficulty, on account of the sinuous condition of the canal. He did well during the first three days, the water passing freely through the catheter and the wound, but on the fourth erysipelas supervened, accompanied with low delirium. He was treated on the usual stimulating plan, and free incisions were made in the scrotum and penis, which threatened sloughing, but he gradually got worse until the tenth day, when he died.

Post-Mortem.—The anterior position of the urethra was found to be much contracted, the posterior tortuous, and indurated in the situation of the stricture, which was long and placed in the more common locality. There were numerous old false passages. The lining membrane of the bladder was dark and congested, and studded, especially at its back part, with earthy deposits.

EXPERIMENTS WITH THE BRAYERA ANTHELMINTICA FOR THE REMOVAL OF TÆNIA SOLIUM.

The three cases, of which we give an outline below, occurred under the care of Dr. Budd, who had determined on giving the Kousso, or Brayera anthelmintica, (a plant of the natural order Rosaceæ,) a trial, having often found ineffectual the remedies in common use, as turpentine, pomegranate bark, &c., which create disgust in the patient, as well as, in some cases, severe constitutional symptoms. This plant, as long ago as the beginning of the year 1847, had been brought under the notice of the Academy of Medicine at Paris, who appointed a Committee to inquire as to it properties. It was in consequence tried, under their direction, in several hospitals, and the result of their experience was such, that they were induced to return a very favourable report. The Academy of Sciences were equally satisfied of its efficacy. We are not aware of its having been tried in any other of the metropolitan hospitals than the one in which the subjoined cases were treated. We hope that other physicians will be induced, by the satisfactory results already obtained, to give it a fair trial, in order that it may be decided whether its powers of destroying the tænia are such as to give it a place in our Pharmacopœia. We shall be happy to receive from our friends reports of any such cases.

The parts of the plants used are the flowers, which, being reduced to a fine powder are macerated in lukewarm water for fifteen minutes. The powder and solution are taken either in one, two, or three doses, quickly following each other. It is recommended that lemon-juice should be taken freely before and after the kousso. The patient must be prepared by low diet for a day previously, and the medicine taken on an empty stomach before breakfast. The clear infusion has the colour, and a somewhat similar taste, to very weak senna tea. It rarely causes any annoyance or uneasiness, except a slight nausea, and this but seldom.

The first woman to whom the kousso was given had generally enjoyed good health. From her account, it is probable that she had not been troubled with tapeworm previous to her coming to London, a year and a half ago, during which time she had resided in Tooley-street, Borough. When the first symptoms of it came on twelve months since, she took oil of turpentine and castor oil, under the use of which a large portion of tænia passed. She had at first a ravenous appetite, which passed away, leaving a constant feeling of flatulency in the stomach. Langour, general debility, incapacity for work, and nausea, were her chief symptoms. During the four months preceding her admission, she was constantly taking various remedies, such as turpentine, &c., under the direction of her medical attendant; but with none of them has the worm passed. When admitted into the hospital, she was ordered half a dram of jalap and low diet, and subsequently other purges, but without bringing away any joints of the worm for four days, when the kousso was administered on an empty stomach, which in the course of the day brought away a large worm. Its head could not be detected, but the narrow portions which seemed to have been joined to it came away. During the same and following day, there was considerable diuresis, but afterwards the urine became scanty. The motions were loose and dark. Her general state improved, and she left the hospital apparently cured.

The next patient was also a woman, aged about forty-four, who had apparently got the worm at Fort Beaufort, in the Cape of Good Hope, at which place she resided for some time. She began to pass joints on the year following that on which she went to that place. Worms are very common among the natives, who are in the habit of taking infusion of pomegrante bark, turpentine, and also a scraped root, called "Cacay." Of all the remedies which she has used, the pomegranate was the most effectual, which has not however cured her, as she continues to pass joints. Her symptoms are gnawing pain, and constant feeling of sinking in the epigastrium, pain in limbs, general lassitude, dimness of sight, loss of appetite short dry cough, and a sensation as of the movement of the tænia. She took kousso as the other patient; it was followed by slight nausea for a quarter of an hour. Its taste, she says, is very much like pomegranate. A tapeworm, of a very large size, was passed four hours and a half afterwards, and subsequently some isolated joints. The head could not be found; but there is no doubt that it came away, on account of the narrowness of some of the pieces. During the same and two following days, numerous joints, apparently long dead and partially decayed, were passed.

The other was a delicate, anæmic-looking woman, who had had the usual symptoms of tapeworm for some time; but did not, to her knowledge, pass any until three weeks, and again one week ago. Is a native of Norfolk; but has latterly resided in Soho, which neighbourhood is supplied with water by the New River Company. She had the kousso exhibited in the same way, followed by a dose of carbonate and sulphate of magnesia. A portion of worm passed with every motion. Both these patients have left the hospital improved in health, and apparently free from any symptom of tænia.

WESTERN DISPENSARY.

On Wednesday, April 3, Mr. Nunn operated upon a patient, aged 40, affected with old standing stricture of the urethra accompanied with retention of urine.

Operation.—A small sound being passed down to the stricture, which commenced at the back of the scrotum, an incision was made through the integuments on to its point, exactly in the median line, and continued to within three-quarters of an inch of the anus. An attempt to pass a grooved staff of larger size proving unsuccessful, the sound was replaced, and the urethra enlarged in an upward direction, by means of a straight knife with a long probe point, the sound acting as a guide. A few strokes of the scalpel served further to expose the urethra sufficiently to enable the operator to hit the contracted membranous portion with the staff. With a knife, having its point protected by the staff, this part of the canal was enlarged sufficiently to allow of a No. 9 catheter being passed into the bladder, the index finger of the left hand being maintained in the rectum, so as to insure the proper direction and extent of incision. Very little hæmorrhage took place. A large quantity of water escaped by the catheter, which was secured in its position in the usual manner, and the patient placed in bed. The following is a short outline of the patient's previous history:—He had been the subject of stricture for more than sixteen years. During the three weeks preceding the operation he had been confined to his room, with his water involuntarily dribbling from him, yet he had sought no advice or assistance until the preceding day. The penis was in some measure œdematous, and there was enlargement and hardening of the corpus spongiosum behind the scrotum. The patient's countenance was expressive of great anxiety, the pupils contracted, the pulse feeble and rapid, the tongue brown and dry.

Mr. Nunn considered that the thickening of the corpus spongiosum was due either to an extensively indurated stricture, or to impending suppuration and consequent extravasation of urine. In the one case, the use of the knife would be highly advisable, in the other inevitable. It was found that suppuration had set in; for at the second stroke of the knife a few drops of greenish thick pus escaped from the tissues external to the urethra. It was clearly not a case for perseverance in attempts to introduce catheters, the constitutional disturbance being so great, whilst the risk of extravasation was hourly increasing. Eight hours after the operation, the patient expressed himself greatly relieved. His pulse was soft and full, the tongue was moist and had lost its brown coating. On the next day his condition was not so satisfactory, there being more constitutional irritation, though the water escaped freely by the wound, and also by the catheter. On the 5th, about 10 a.m., after a restless night, the patient was seized with epileptic convulsions, which unfortunately recurred at intervals till he died about the same hour on the following day.

No *post-mortem* could be obtained; but Mr. Nunn thought it probable that disease of the kidney was the cause of the patient's death, for the wound appeared perfectly healthy. The patient had not previously been the subject of convulsion.

PROGRESS OF MEDICAL SCIENCE.

FRANCE.

[Paris Correspondence.]

DIMINUTION OF FIBRINE FROM AGITATION OF THE BLOOD—EXPERIMENT ON THE LIVING BODY.

The experiments of MM. Marshal and Corne, recorded in the *Medical Times*, have proved that the proportion of fibrine contained in the blood is diminished by agitation of that fluid. The experiments alluded to, however, were performed out of the body, and it remained to be seen whether the same effect took place from agitation of the blood in the living machine. M. Hervier has endeavoured to resolve this interesting question in the following manner:—

Having been bled to the amount of four ounces, the worthy experimentalist set about running with all his might, and continued at full speed for nearly fifteen minutes. The pulse was now, of course, very rapid. Four more ounces of blood were immediately drawn from the arm, and both quantities were carefully analysed. The second blood contained 0.045 less fibrine than the first. The experiment was conducted with the utmost care, and the fibrine dried—a precaution which should always be taken. In this case, then, agitation produced a notable diminution of fibrine, although the temperature of the body was raised nearly two degrees. But an explanation of the phenomenon may be demanded. M. Hervier offers two. During rapid exercise, the quantity of carbonic acid expired is increased, and the surplus may perhaps be derived from the fibrine, which may be consumed in greater quantity. This explanation does not satisfy M. Hervier, who is inclined to prefer the following:—It is well known that venous blood contains less fibrine than arterial. Now, during rapid and long exercise, the blood collects in the superficial vessels, and becomes, as it were, more venous still—hence, probably, the increase of fibrine. But whatever be the explanation, the fact is not the less certain and interesting.

TUBERCULAR GONORRHŒA.

Some years back tubercle of the testis was generally confounded with scirrhus, and even in our own time we have seen more than one testicle removed as scirrhous, whereas, examination afterwards showed the tumour to be simple tubercle. More recently still, tubercular matter has been found in the substance of the prostate; but M. Ricord, I believe, is the only surgeon who has met with and described tubercular degeneration of the urethra. At the last meeting of the Academy, he related an interesting case of this kind, occurring in a patient fifty-eight years of age. Some years previously M. Ricord had removed a tubercular testicle from the patient. Since then he had laboured

under obstinate gonorrhœa, for which he returned to the hospital, where he died. On examination after death a large tubercular abscess was found in the prostate, and the whole of the mucous membrane of the urethra was infiltrated with a multitude of miliary tubercles. The urethra also presented many points of ulceration, from softening of the aggregated tubercles. This is only the second case of tubercular gonorrhœa which M. Ricord has met with during the course of his long and extensive practice.

This, perhaps, may be the proper place to notice another form of blenorrhœa, which is rare, and I believe little known to practitioners in England. It is connected with inflammation of the ducts from Cowper's glands, and often with inflammation and suppuration of the gland itself; and when this latter occurs, the symptoms are always peculiar, because the glands are seated between the middle and superficial layers of the pelvic fascia, and hence the abscess makes its way to the skin.

Inflammation of Cowper's glands generally arises from gonorrhœal inflammation of the duct, and it is curious to observe that the attack usually occurs on one side only. The first symptoms are more or less severe pain, with tension in the region of the bulb, and careful examination will discover a small pyramidal tumour, occupying the precise seat of the gland, and extending forward towards the bulb of the urethra. The inflammation soon extends to the other side of the perinæum, implicates the scrotum, and gives rise to a considerable tumour, which, as M. Ricord observes, often becomes attached to the epididymis. In a few days the tumour softens, and purulent infiltration takes place in various directions. Hence it should be opened as early as possible, for the urethra is soon perforated and urinary fistula ensues. These abscesses were long confounded with urinary abscesses in general; but the symptoms now described will be sufficient to determine their special character. Several cases of the kind have presented themselves recently in the practice of M. Ricord, at the Hôpital du Midi.

ABSENCE OF THE UTERUS, HERNIA OF THE OVARIES, &c.

M. Cazeaux, Professor of Midwifery, related a very curious case of malformation at a late meeting of the Biological Society. It is worthy of record in many points of view.

A young girl, 21 years of age, long attached to an officer, at length yielded to his solicitations; but all efforts were useless, and the disappointed lover sent the girl to consult a medical man.

There was nothing in the general appearance of the patient to indicate the malformation with which she was affected. The mammæ were perfectly well formed. Six months previously her catamenia had appeared for the first time, although for many years before that she had experienced the ordinary symptoms of uterine congestion. During the attempts made at coitus, some blood also was discharged from the parts.

On examining the latter, the mons veneris was found completely deprived of hair. Two small tumours occupied the external orifices of the inguinal canals, having the form, size, and consistency of the ovaries. The labia were extremely small, and the clitoris hardly to be distinguished. The finger could not penetrate more than a line or two into the vulva, nor could any opening be discovered with a probe, which was passed in all directions. On examining through the rectum and bladder, no trace whatever, either of the uterus or superior part of a vagina, could be found. From the above facts, M. Cazeaux concludes that the uterus and the superior four-fifths of the vagina were absent in the present case; that the hypogastric and lumbar pains which the girl felt periodically, and nearly every month, expressed a periodical ovarian effort; and lastly, that the blood discharged on two or three occasions, came from the mucous lining of the rudimentary vagina.

DEATH OF M. PREVOST.

The journals announce the death of M. Prevost, who for many years occupied a high rank amongst scientific physicians, and distinguished himself particularly by his labours in conjunction with Dumas. He was a native of Geneva, and, although his medical education was Parisian, he took the degree of M.D. at Edinburgh in the year 1816. Thence M. Prevost visited Dublin, where he became attached to a Fever Hospital, contracted fever, and was nearly cut off at the commencement of his career. Established in his native city in the year 1820, M. Prevost applied himself to the improvement of medicine through the then neglected sciences of chemistry and physics. Young Dumas came under his notice, and master and pupil commenced the series of brilliant investigations which have thrown so much light on the nature and properties of the blood, and through which their names will be transmitted inseparably to future times. They continued to work together up to the year 1823, when M. Dumas returned to Paris; but in three short years their united labours produced results of the highest interest and importance. After the loss of his pupil and friend, M. Prevost still continued his scientific researches; but practice came in spite of the philosopher, and for twenty-five years he occupied the first rank as a Physician at Geneva. The honour and position were well-merited, for few Medical men equalled him in variety and depth of knowledge, or in the rare art of applying what he had seen and read in the most perfect manner to the case before him.

M. LEBERT ON SCROFULA AND TUBERCLE.

The following propositions are a *resumé* of the important work of M. Lebert on Scrofula. They contain the essence of his doctrines and experience:

1. The disease described under the name of glandular scrofula is commonly a tuberculosis of the superficial lymphatic glands. The tubercular matter is here of the same kind as when it exists in other organs.

2. These tubercles have a manifest tendency to softening; the symptoms of inflammation and suppuration often arise from the tissues surrounding the tubercles.

3. Glandular tubercles do not constitute a form, but a complication of scrofula. The latter does not present any precise element which the microscope can discover. Scrofulous affections consist in a series of chronic inflammations or caco-plastic formations, which, from their multiplicity, duration, and alternations, denote a special morbid state affecting the whole economy.

4. Hypertrophy of the superficial lymphatic glands is rarer than tubercular degeneration.

5. Superficial tuberculosis often exists alone, without any scrofulous complication; but the two morbid states have a tendency to co-exist in the same subject.

6. It should, however, be remarked, that, in 614 patients affected with external glandular tubercles or scrofulous diseases, 439 were exempt from any trace of tuberculosis,—a fact which proves the two diseases to be independent of each other.

7. With respect to progress and prognosis, there is a notable difference between external glandular tubercles and internal tubercle, especially in the lungs. The former may exist for a great length of time without danger, then dry up or be eliminated. The latter march more rapidly, and more often prove fatal.

8. External tubercles arise more frequently in a spontaneous manner, than as a consequence of hereditary disposition. The latter manifests itself, in the same family, sometimes through scrofula, sometimes through tubercle,—a circumstance showing affinity, but not identity of the diseases.

9. External tuberculosis does not produce death, unless it be complicated with internal tubercle.

10. The prognosis becomes unfavourable whenever scrofulous affections of the bones or joints are added; or when a large quantity of tubercular matter is deposited in the glands,—for then internal tubercle arises more easily.

11. The surest means of eliminating the diseased matter is suppuration. External tubercles rarely become cretaceous, though they often remain stationary.

12. Scrofula is most frequent between the ages of 5 and 20; girls are more frequently affected from 10 to 15, than from 15 to 20; the contrary holds good for boys. Puberty does not exercise the influence which it is supposed to do over the progress of the disease; the influence of seasons is also feeble.

13. The majority of patients do not present evident signs of a scrofulous or tubercular diathesis.

14. The influence of proper hygienic treatment is more marked in proportion as those means had been previously neglected.

15. There is no specific, nor any remedy capable of producing the absorption of crude, tubercular matter. Iodine may improve the constitution and diminish the chronic inflammation of the tissues surrounding the deposits; but it does not remove the latter. Its use is contra-indicated by permanent dyspepsia or diarrhœa. Ioduret of potassium or of iron are the best preparations in such cases.

16. Cod-liver oil exercises no direct influence over glandular tubercle; it can only act usefully on the different scrofulous complications.

17. Calomel, once so much employed in the form of Plummer's pill, merely acts as a purgative on the inflammatory complications. We have no proof whatever of the utility of the preparations of gold, sulphate of barytes, or the salts of lime.

18. Bitters and tonics are indicated in cases of long-continued suppuration. Bark and iron are the best. A decoction of nut leaves is a useful adjuvant. Salt water and other medicated baths are also useful as means of improving the constitution; but the tubercular matter can only be removed by suppuration.

19. Sulphurated baths are useful when a great number of ulcers are suppurating. Hydropathy, with the use of iodine, merits examination.

20. A good animal and vegetable diet, pure air, cold baths, and exercise, act favourably on the constitution.

IRELAND.

[Dublin Correspondence.]

CHLOROFORM IN OBSTETRIC PRACTICE.

The all but simultaneous appearance of a pamphlet from each of our two best Irish obstetric writers, on the very vexed question of chloroform in midwifery, must satisfy our Edinburgh neighbours that we have not been quite so much asleep of late as they thought; one by Montgomery, the other by Murphy, whom we must claim as a son of the Green Isle, albeit we are happy to find him in the Presidential chair in the vicinity of St. Margaret's, Westminster.

Montgomery's pamphlet is levelled, in somewhat too popular a style, against the "indiscriminate" administration of anæsthetic agents in midwifery, and amounts, after a rather circumbendibus way, to much the same thing as the treatise by Murphy. The latter, at once clear and philosophic, must prove a most useful guide to the wavering practitioner, especially him of the country, who has really little time or opportunities for experimenting, yet to whom it is satisfactory to state, that the chloroform bottle will prove a friend of no ordinary value in all midwifery cases; one, indeed, of which he need not be in the least afraid.

The three chief points about which both Montgomery and Murphy seem anxious, are, whether chloroform interferes with the normal action of the uterus during labour; whether the safety of the child is hazarded by it; and, whether any ill effects subsequently manifest themselves; to all which it is satisfactory to give a most decided negative. In the selection of cases two classes were separated, the first those in which operations were necessary; the second, mere cases of natural labour; in both, the results have been highly satisfactory. In the cases of ordinary labour, he did not see any necessity for the fearless practice of Simpson; it was not given by him as a rule in every case, but rather in exceptional cases, but in such with the best possible effects. It would seem an agent that one should as soon think of going without as ergot of rye or a catheter.

In some cases, in place of chloroform, he used the ordinary "Dutch liquid." The effects were perhaps not so marked. In ten operation cases he used chloroform, in three the Dutch fluid. The tonic contractile power of the uterus in all (though sensation was abolished) was not in the least diminished; in all, the placenta was separated by the contractions of the uterus alone; in none was there hæmorrhage; and in thirteen cases, ten children were born alive. The anæsthetic did not seem to affect the

child, and the subsequent recovery was, perhaps, the chief advantage, though more than one of the operations turned out most difficult and protracted. In the cases of natural labour, as well as the similar cases cited as occurring in the other Dublin Hospitals, the result was equally encouraging. The latter amounted to fifty-six cases, forty-four instrumental, twelve natural. Denham, however, described the pains as "weaker;" in one case ceasing altogether, and in two cases the effects very problematical. Murphy seems satisfied, however, that chloroform does not paralyse the uterus in cases of operation—turning—this was quite evident; many patients, completely soporised, made powerful expulsive efforts, and afterwards expelled the placenta. In a most troublesome case of elbow presentation, in a strong, vigorous woman, the labour of operating was frightful, yet the patient did not utter a groan, and after it was over knew nothing of what she had just gone through. To these fifty-six cases in Dublin, he adds seventy-eight cases by Dr. Channing, and 471 other cases collected by the latter, all highly satisfactory. The objections of Montgomery are based on the indiscriminate recommendations of this agent by our northern friends. Both treatises will prove of very signal service, as giving us the unprejudiced feeling with respect to the matter in our schools at the less pretending side of the Tweed.

PERINÆAL ABSCESS BURSTING INTO THE SCROTUM.

At the last meeting of the Surgical Society, a case of this nature (a practical commentary on the directions of Mr. Rynd, noticed in the *Medical Times*, p. 245,) was brought under discussion by Mr. Rumley. The case was that of a man, a solicitor's clerk, who the latter end of last month called on Mr. Rumley with pain and fulness between the tuberosity of the ischium and ramus of the pubis, with very evident fluctuation and redness from some cause. He would not allow it to be opened, though in excessive pain; and proceeding home in a vehicle he got a sudden jolt, with false but temporary relief. Next morning he was exceedingly ill, and suffering from violent pain in the scrotum. The latter was much enlarged, reddened, and tender; in fact, the abscess had made its way into it. The tumour of the day before was gone. A small blue spot, the size of a fourpenny piece, formed on the scrotum, and Mr. Rumley then made an incision, which was followed by matter. Two days later a slough appeared on the scrotum, a piece the size of a half-crown being ultimately destroyed. There were no signs of urinary irritation, however, and the man has recovered. Granulations starting up from the tunica vaginalis, during the progress of the case, the purulent matter could be forced along towards the opening in the scrotum, or back towards the perinæum. There seemed no communication with the urethra. In the course of the discussion Dr. Geoghegan cited some cases not very dissimilar, as occurring in his practice; his impression being, that many of the cases of extravasation of urine were essentially of this character. If corroborated by further experience, this, I need scarcely say, is a point of very curious practical importance.

MORTIFICATION OF THE FEET FROM COLD.

An unusual but interesting case of this nature was lately brought under discussion, also occurring in the practice of Dr. Bellingham,—a rather rare affection in these latitudes, but easily accounted for by the extreme cold which characterised the weather at the beginning of the present year, the thermometer standing one day in Dublin so low as 19°,—13° below the freezing point. The case was that of a poor labourer, who was in his usual health about the time specified; went to bed one night quite well, but, after a couple of hours, began to suffer from pain and heat referred to the instep, and had no sleep. In the morning both legs and feet, as high as the calves, were swollen, and of a purple colour, hot and sore; the sensation, however, perfect for two days. The swelling, which extended at first to the calves of the leg, diminished subsequently, and in two days the feet had become black and insensible. Brought into hospital; about two inches above the ankles, both bones of each leg were perfectly bare, white, dry, and without periosteum. Above the point of separation of the dead and living parts, granulations seemed abundant; the parts were moist, and gave out the ordinary smell of gangrene. The wretched creature's appetite was good, but he had a tendency to diarrhœa; the tongue was dry; and he slept badly on account of the soreness and heat. A week in hospital, the tibia and fibula of one leg were sawn across where they were bare; the medullary canal was found full of pus. Next day the patient felt so much better he had the operation performed on the other leg. The last report, of the 21st ult., was, that he suffered no pain; exposed portions of tibia and fibula white and dry; discharge and granulating surface healthy; patient had gained strength; ate and slept well, and was sitting up. A long discussion ensued at the Society as to the necessity of amputation high up, Mr. Rumley, Mr. Butcher, and Mr. Cusack being advocates for it. Several cases of a similar nature were cited as seen after fever. In an epidemic in the year 1817, it was very common. A practice found very effectual was, the application of leeches and evaporating lotions along the line of separation. In the cases following fever, as well observed by Kennedy, the first symptom was pain, mostly referred to the neighbourhood of the ankle joint, and across the toes. After two or three days the parts became slightly swollen; sooner or later, re-action, attended with inflammation, and if not controlled, the limb became quite black. In many cases leeches arrested the progress of the disease, which led him to hope the knife might be dispensed with in the case under consideration.

COLLEGES.

A Professor of Botany will be elected by the Council of the College of Surgeons on the 2nd of May; candidates to apply before the 25th inst. In the other Colleges there is nothing very remarkable to note. The close of the first Winter Session has given occasion to a sort of valedictory address from Sir Robert Kane, who, notwithstanding many annoyances, continues to augur well for these institutions. He has been twitted in the papers for holding forth to three boys "eating sugar-stick,"—the fact being, that there was something like ninety present not so engaged. The circumstance may be worth noting, to give it a contradiction. The schools seem fairly established; and the little Baronet (great with a bit of chalk at chemical equations) has been invited to a grand banquet to commemorate the occasion. In Belfast and Galway, things wear a quieter aspect.

GLANDERS.

Five fatal cases of this terrible disease have recently occurred in the North of Ireland. Unknown, perhaps, in these countries, till the attention of the Profession was called to it by Elliotson, it has, of late, become but too familiar. One of the cases was a farmer, named Montague, who died in great agony, near Aughnacloy. Another, his wife, who contracted the disease while attending her husband. Of the frightful nature of this malady I fear we know little, except that of its being a specific morbid matter, capable of contaminating the system with amazing rapidity, not unlike small-pox. Creosote and medicines of that class our only hope.

SELECTIONS FROM FOREIGN JOURNALS.

MICROSCOPIC PATHOLOGY.

[We have already stated, that the Academie des Sciences, in the late adjudication of prizes for the year 1846, assigned, in the department of Medicine and Surgery, the first rank to the work of M. Lebert. As the terms in which the members of the Commission (viz., MM. Serres, Duméril, Majendie, Roux, Rayer, Andral, Velpeau, Flourens, and Lallemand) speak of this work give a kind of brief history (which might, however, have been fuller) of the progress of histological observation in Pathology, we have thought that it might not be uninteresting to place before our readers a translation of the Report to the Academy:—]

"The Commission has placed first the work of M. Lebert, entitled, 'Clinical, Experimental, and Microscopical Observations on Inflammation, Tuberculisation, Tumours,' &c., (2 vols. 8vo., with an Atlas.) The Author has the especial merit of being one of the first observers in France to devote himself to extended microscopical observations on the different morbid products. If the genius of Bichat created the department of General Anatomy,—if Dupuytren, Laënnec, Broussais, and their followers, have founded the French School of Pathological Anatomy, as far as morbid conditions are recognisable by unassisted vision, we have been outstripped by our neighbours in the application of the microscope to the minute study of the human tissues in their normal, and, still more particularly, in their abnormal conditions. In 1846 (1826?) Treviranus presented to us a new aspect of General Anatomy, by reducing, with the aid of the microscope, tissues, heretofore regarded as simple, to their true elements. Then came the researches of Kraus, of Louth, and others, on the Cellular Tissue; in 1830, the treatise of Müller on the Structure of Glands; in 1834, the observations of Berres on the Capillary Vessels; and, lastly, in 1839, appeared the treatise of Schwann on the Nucleated Cell, which was considered by him as the base of all formation, vegetable and animal,—an idea which was, indeed, the bold generalization of the observations and ideas gradually introduced into Science by Prévost and Dumas, Milne Edwards, Dutrochet, Raspail, Brown, Schleiden, Purkinje, Valentin, Wagner, &c.

"As to Pathological Anatomy, in 1838, Müller had already published a work 'On Tumours,' in which he endeavoured to distinguish these products, and to classify them, by the aid of the characters furnished by their microscopic examination. There, for example, is described, for the first time, the 'cancer-cell.' Afterwards, Gluge published, at Minden, his observations on Inflammation, and made known, under the name of 'granular globules,' (*globules granuleux,*) a special kind of corpuscle, which is produced in that morbid condition; a formation, the distinctive characters of which can be given only by the microscope. In 1843, Vogel published his 'Icones Anatomiæ Pathologicæ,' in which work many alterations of tissue, chiefly studied by the microscope, are represented. Gruby has also devoted himself to important researches on many points of microscopic Pathological Anatomy, particularly on the development of parasites.

"M. Lebert, in profiting by these works, has revised each of them minutely, and has verified them by his own observations. He has developed or corrected the opinions of his predecessors, and the figures which he gives of the same objects are generally better than theirs.

"In studying the matter of tubercle with a power of 500 diameters or more, he has discovered special 'corpuscles,' which are distinguished from all other, by being without nuclei, but containing granules strewn through them. The descriptions and the delineations of M. Lebert have been found so accurate, by the writers who have followed him, that they have been generally adopted, even by those who, in previous publications, had described and figured the tubercle otherwise. Finally, many members of the Commission have had to recognise, in tuberculous matter, and only in that matter, the corpuscles described and represented by M. Lebert.

"As to the 'cancer-cell,' indicated by Müller,—described more thoroughly, and delineated more faithfully, by Vogel, in the fundamental type and in its varieties,—it has been re-produced by M. Lebert, in his Atlas, with a remarkable exactness and nicety. At this moment, M. Lebert is engaged in a series of researches, which he pursues most perseveringly, and which have led him to think, that many tumours which are seated in the skin, or on mucous membranes, are only 'pseudo-cancers,' although their external appearance has caused them to be usually enumerated among the veritable cancerous affections. M. Lebert supports this view by the fact, that the microscope finds, in such 'pseudo-cancers,' not the cell which characterises true cancer, but other elements, such as epidermic or epithelial cells, or hypertrophied demoid tissue, or altered follicles, or papillæ modified in form and texture. According to him, these pseudo-cancers, when removed, can easily relapse among the tissues which originally gave them birth, but they are never followed by a general infection, a cancerous cachexia. Fully recognizing the fact, that the great majority of tu-

mours, considered as cancerous, offer to the microscope a special cell, the Commission yet think, that the absence of this cell, in certain tumours, apparently cancerous, and liable to return, does not authorise their separation from cancer. Nevertheless, it should be added, that M. Lebert has done service to pathology, by demonstrating, microscopically, a difference in the minute structure of the so called cancerous tumours.

"We find, also, in M. Lebert's work, interesting and little known details on the melanic tumours and erectile tissue. He has described also, under the name of fibro-plastic, an abnormal tissue which constitutes essentially certain humours formed of fibrous and of cellular tissue, in process of formation.

"Finally, M. Lebert has minutely followed the changes which occur in the vessels of inflamed parts. By the aid of the micrometer he has exactly determined the increase which the vessels undergo in their diameter, and that in the tissues of the economy. He has studied with more care than any of his predecessors, the various products of inflammation, especially pus and fibrinous deposits."—*Comptes Rendus*, No. IX., March 4.

[We have given this translation, not because of the eulogy on M. Lebert, although even for this reason we should have been glad to do so as an act of justice, but with a view of putting before our readers the deliberate judgment of the men composing the Commission as to the diagnostic significance of the "tubercle corpuscle" and the "cancer cell."]

TYPHUS EXANTHEMATICUS IN PRAGUE.

Dr. Schultz, in the Prague *Vierteljahrschrift*, has given a very good account of the typhus which prevailed in Prague in the winter months of 1847 and 1848. Although the writer admits only one kind of typhus, *quoad essentiam*, he yet thinks, from his experience of this epidemic, that there are two manifestations of it, one of which is the so-named abdominal or ilio-typhus; the other is an affection which presents no lesions of the intestinal canal or its follicles, but is recognized by a copious eruption, and is, probably, identical with the typhus exanthematicus of Hildebrand, and the typhus petechialis of Schonlein. "In ilio-typhus the exanthem does not belong to the essential symptoms, and in most cases either fails altogether, or appears only very partially." In twenty dissections of typhus exanthematicus there was found, as constant appearances, only "blood-dissolution," hypostasis of the lungs, and tolerably large spleen-swelling. In one case there was lobar, and in three lobular pneumonia, with a tendency to mortification; in one, catarrhal pneumonia, and in one pleurisy, with unhealthy-looking effusion. The brain was, in almost all cases, tough and compact; "the mucous membrane of the intestinal canal was in all cases perfectly sound." Some cases of ilio-typhus which occurred at the same time were known during life by differences in the outbreak, course, and assemblage of symptoms, and by the absence of the exanthem, to be different from the reigning affection. The description of the symptoms is given at some length, and accords perfectly with those with which the English practitioner ought to be familiar; the chief other points of interest are, the occurrence occasionally of a soft systolic murmur over the heart and the great vessels, occasionally a dicrotous pulse, a spleen swelling, which could sometimes be felt below the false ribs; and invariable constipation. The eruption is termed "roseola or purpura typhosa;" it came on during the first days, and before its appearance the diagnosis was difficult. It appeared in young as in old persons; in fine, as in dark skinned persons, only in this last case the colour was darker. In many cases the description agreed accurately with that given by Virchow, who termed the eruption "Exanthema morbilliforme, rubeolose eruption." In some few cases there were true petechiæ mixed with this eruption. Sudamina often appeared. The urine at first, perhaps, scanty, becomes always copious afterwards, and particularly towards the close of the disease, as noticed already by Jaksch in 1837. The increased size of the spleen was a most important symptom; and if this sign, as well as the eruption, was absent, the disease could not be safely diagnosed. Sometimes there was pain on pressure over the spleen. The head symptoms were buzzing and noise in the ears, and delirium even in the slightest cases; in a few cases violent delirium and perfect deafness; in one case there was mania, and death occurred in convulsions like hydrophobia. This epidemic spared neither sex, age, nor condition; and whereas, according to Rokitansky and Hamernjk, the ilio-typhus never, or only exceptionally, combines itself with other affections, the disease in question occurred in pregnant women, in suckling women, in persons suffering from emplysma, heart diseases, chlorosis, head affections, &c. Relapses (apparently true ones) seem to have been not uncommon.—(*Prague Vierteljahrschrift*, 1849. *Zweiter Band.* p. 34.)

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THE MEDICAL TIMES.

SATURDAY, APRIL 20, 1850.

The recent Meeting of the National Institute must be gratifying to all men who have any faith in the future of the Profession. It was the triumph of just principles, and the expression of a hope which is already shaping itself into a reality. Opinions beget facts. Events are insensibly moulded by their plastic power, and crystallise themselves around their pervasive attraction. There is, in opinion, a sort of chemical action, that seems to precipitate facts from the transparent menstruum of worldly circumstance, and to aggregate them into masses, making that tangible and visible which was before diffluent and undiscerned. The Colleges may harden or relent, defy or tremble, insult or propitiate, the issue will be the same. The law of public opinion will prevail over them, and vindicate itself by exacting full retribution.

The General Practitioners have declared, that they will be satisfied with nothing short of the management of their own affairs; and this determination was never more emphatically expressed than at the late meeting at Hanover-square. The resolve has gathered force from every repulse; and is now quickened by a sense of the bad faith with which the governing body of the College of Surgeons has acted towards the National Institute. Never at any public meeting of the Profession was any sentiment more vehemently and unanimously applauded, than that which proclaimed the determination of the General Practitioners to establish the principle of self-government, and to take into their own hands that power of regulating and protecting their interests, which the Council of the College of Surgeons has neglected to exercise. All parties are agreed upon this principle; it underlies every other, and is essential to any real reform of our institutions and laws. We have unremittingly taught this as an axiom from which Medical Reformers should never depart, if they would not be deceived by empty promises, and beguiled with shadows. This, however, is exactly the principle that the Council of the College of Surgeons, so far as that Institution is concerned, will never concede; for then there will be an end of nepotism, intrigue, private influence and artificial distinctions, and there will be free discussion, unbribed suffrages, justice, and an open course to the offices of emolument and honour for all candidates.

But the meeting at Hanover-square spoke with still more precision and emphasis. It demanded a new and independent College for the General Practitioners. Scores of names were affixed to a Petition to the Legislature, praying for an Act providing for such an Institution, and many scores of persons left without being able, in consequence of the pressure of the crowd, to attach their signatures. This is the last affirmation of the General Practitioners, their public proclamation to the Colleges and the Government, that they are resolved never to forego their claim to a free representation in an independent College, whose powers shall be administered by men of their own order. Will the College of Surgeons, with a lunatic obstinacy, continue to despise the warning? If they have no respect for the celebrity of their College, and the interests of their members, have they, also, none for the great name of Hunter and the obligations which they owe to him as the custodians of the gift by which they themselves have become famous? The Council shine with a borrowed radiance; their halls are filled with the glory of Hunter. Enter the vestibule, and you discover that it is the fane of a lost prophet. Wherever you tread are the relics of his grand career; the air is perfumed with his genius; the entire building is his monument. What other name, except that of Sir E. Home, the incendiary and the plagiarist of his labours, but the honoured *protegé* of the Council, attracts observation? The College of Surgeons owes all its vitality and all its grandeur to John Hunter; and the Council should be careful how they suffer its lustre to be tarnished by alienating the affections of the members, perverting their own influence and functions to sinister ends, and detracting from the multiplied and beneficent uses to which the bequest of the great founder of scientific surgery might be applied.

The arrogance with which the Council have asserted that *they*, as individuals, are the glory of the College, and are entitled, by right divine, to its highest places and most lucrative appointments, would be laughable if it were not so pernicious to the welfare of the Institution and to the progress of scientific surgery in this country. The best proof of the necessity of these men to the maintenance of the dignity of the College should be found in the records of what they have done for it. Search the Museum through, and how much of it will be found to be contributed by the Councillors of the College downwards, from Earle to Green? If they have any modesty they must blush for *shame* at the paucity of their contributions, and of their own incomparable littleness, each time that they confront the majesty of Hunter in the mute record of his labours.

But the Profession have done with the College of Surgeons, and now look to the Govern-

ment! What regard will Her Majesty's advisers exhibit for the unequivocal and ardent expressions of opinion and wishes that were manifested at this important meeting? Will they coerce the Council of the College of Surgeons, and make that College the *Alma Mater* of the entire body of General Practitioners,—will they grant the Petitions of the meeting without reference to the College of Surgeons,—or will they disregard both, and proceed in their own course with a plan that will not please either, and may possibly offend all? A few weeks will show. In the meantime, the General Practitioners throughout the country will best do their duty by *petitioning* earnestly for a new and independent College for the General Practitioners. Let the House of Commons be crowded with Petitions during the next three weeks, and the intentions of Government will either be defeated if they are evil, or assisted if they are good. The Petition adopted by the Public Meeting is now lying for signature at the Rooms of the Institute, and we hope that the large majority of Metropolitan Practitioners will subscribe their names. This should be a "Monster Petition."

For our own part, we regard with satisfaction the establishment of a new College for the General Practitioners. Viewing it as a last resource, we still believe, that such an Institution would contain the elements of a great and progressive improvement in the education and *status* of this important section of the Profession. The emulation to which it would immediately give rise, would necessarily elicit the brightest talents and the noblest aspirations of the Profession, and lead to the most earnest and fruitful cultivation of Medical Science and Art. Few fields of study would be allowed to lie fallow under the genial patronage of an Institution whose credit and greatness must necessarily be derived from the elevation of its members in the scale of literature and science. The conditions by which the College of Surgeons has become prosperous and renowned, would be reversed in this Institution; and, whilst the Council of that College spurn their members as not needing them, and are content to recline ingloriously under the shadow of Hunter's genius, the Council of the new Institution would seek for strength in the talents and activities of the members, and would build up the celebrity of the College upon the aggregate merits of the *alumni* whom, with parental anxiety, they had educated and encouraged in their honourable career.

Before such an opposition, the precarious greatness of the College of Surgeons would soon fall. This body would be compelled to step aside before the march of a younger and more athletic champion. Without a corresponding reform within its own walls, the days of its glory would be numbered. It would be a tradition, a memorial, a proverb,—but a vital, potential, growing fact it would be no more. Though its spirit might remain with it, yet it would not be the spirit of the age; and what is not of the age, the age will not recognise, but separate from it as an antagonism and a power of sinister and maleficent influence. If the College of Surgeons would not be cast off as a dragweight upon the intellectual and social progress of the Profession, the time is now come for it to reconsider its policy, and reform its Constitution. But such a Reform must comprise all that we demand in a College of General Practitioners.

WIDOWS' AND ORPHANS' SOCIETY.

The Anniversary Dinner of the Metropolitan Society for Widows and Orphans, affords us an occasion to call the attention of the Profession to its benevolent and laudable objects. For a single payment of from 20 to 30 guineas, or an annual payment of about 2*l.* 2s., a Practitioner can secure, in case of his death, an annuity for his widow, varying, according to circumstances, from 25*l.* to 35*l.* per annum; together with a small annual payment for each orphan under the age of puberty, according as the circumstances of the case may seem to require. The spirit in which this Society was established does honour to our Profession. It is the outflowing of a generous sympathy for misfortune and privation, and appeals to the conscience of every man, rich or poor, in the Profession. The calculating policy which governs the ordinary Assurance Societies has no place here. The Metropolitan Society is not intended for the benefit of those who have the means of leaving an adequate income to their widows, or even of those who can, without sacrifice, pay ten or twenty pounds a year to secure the same advantage; but for the hard-working, badly-paid, and unfortunate Practitioner, who, out of his meagre earnings, can find no superfluity to provide for the contingencies of future misfortune.

Without desiring to depreciate Assurance Offices, based upon strictly commercial principles, which, by inducing forethought and self-reliance, are Institutions of the highest importance to the community, we still regard with satisfaction the exhibition of a benevolent and unselfish spirit, and prize those benefits highest which are conferred upon individuals whose need enhances the value of the bounty. We like to see benevolence meet desert halfway. They reward each other. Self-help is a noble fellow; but God's-help is a good assistant.

None are eligible to become members of this Society who live beyond an area confined within a circuit of seven miles round the Metropolis; so that it is wholly a Metropolitan Institution. We think that this is a defect; and if this Society cannot be extended with safety over the whole country, consider that it would be a great boon if a Society, established on similar principles, could be made applicable to the necessities of our Provincial brethren. The chief advantage of this Society consists in requiring so small an annual payment, that almost every Practitioner could afford it without sacrificing a single comfort; whilst, if he should become so rich as to place his widow above the necessity of applying for the annuity, he would not feel the loss of his contributions; and would, if a man of true professional feeling, be glad that he had been induced to subscribe so trifling a sum to afford effectual aid to a medical brother.

We trust that the Practitioners in the Metropolis will join this Society in large numbers, if not from a feeling of need, at least from a sentiment of benevolence. No man can be certain of his future destiny; and it would be a pleasant thing to find, at the end of a laborious career, which the providence of God has not allowed to terminate auspiciously as to worldly wealth, that, at an earlier day, when in prosperity and affluence, a provision had been made for the widow and children against the hour of bereavement and destitution that had at last reached them, and which, but for this, would leave them without comfort and almost without hope.

DISTRICT LUNATIC ASYLUMS IN IRELAND.

The following valuable Return has been just ordered by the House of Commons. We regret that it does not go much deeper into the subject, particularly as these establishments are in progress of change. However, it is a good one as it stands; inasmuch as it will expose pluralities, of which the public know little—pluralities totally incompatible with the sound and wholesome discharge of Asylum duties, and which must very soon give way under the blaze of public opinion. Many salutary changes have been within the last year brought about by us, particularly in the appointment in *four* of the Irish Asylums of resident Physicians. We regret that measures are not at once taken to carry out this great reform in the rest; since, if *resident* Medical Officers are essential in *four*, we do not see how they can be dispensed with in the other *seven*. We are aware of the services rendered to the Medical Profession by the present Inspectors, White and Nugent; but, two Officers hampered, as they evidently are, with complicated restrictions, can effect little, unless sustained by Parliamentary Returns similar to the following, and Parliamentary men be then found able and willing to make effective use of such Papers.

Let us hope, that in their next Annual Report, they will boldly claim the appointment of resident Medical Officers for the remaining seven great Irish Asylums, which are unfortunately still deprived of such essential Officers; and that they will incorporate the information which this Parliamentary Paper will supply in the details of their Annual Report:—

"Return, showing the number and names of the Governors of each Asylum; the dates of their appointment; the counties for which they have been appointed; the number of meetings held in each year during three years ended 31st December, 1849; the names of members attending such meetings for said period; the number of urgent cases admitted, distinguishing the county from which received, and the distance of each urgent case's residence from the Asylum; the average duration in each month, stated in hours for each month during said three years of the medical attendance, distinguishing at foot how often such attendance took place after 2 o'clock, p.m. of the Visiting Physician, Surgeon, or Apothecary; the number and names of all officers; the number and names of all servants; their salaries and wages; stating whether officers and servants hold others, and, if so, what situations, public or private, independent of and unconnected with their respective Asylums; the number of curable or probably curable cases; the number of incurable or probably incurable cases, distinguishing the latter into harmless incurable insane, harmless idiots, mischievous or dangerous incurable insane, mischievous or dangerous idiots, for three years, ending 31st Dec. 1849."

THE WATER QUESTION.

We have been gratified to find some old views of ours on this all-important subject fully borne out by our contemporary, the *Edinburgh Review*, just published. The supply of this essential of

life to our rapidly increasing community can no longer be lost sight of. The principle of competition has failed to supply our poor and densely populated districts, and if there must be a monopoly—as the general impression of all thinking men seems to be there must—it should have a shape something like the Post-office, Bank, &c. Government must have a control over some responsible body. 70,000 houses in London, according to a Report of the Health of London Association, are without water, and still our people in authority are found higgling in the matter. According to the best authorities, the 370,000*l.* now paid for water would, if properly laid out by Government, pour a constant supply into every room in the Metropolis. New York has lately expended two millions and a-half pounds sterling in water-works; an aqueduct forty miles long brings a supply of sixteen million gallons every day to our friends of the Broadway; and that we should be behind our neighbours is not very creditable to our rulers. The idea of supplying London from the chalk formation is now, perhaps, given up by every one. The matter then falls within a very small compass: what point of the Thames is most accessible and the purest? Shall we have the supply, as we suggested before, from Maple-Durham or Henley? Above or below Reading, at either of these places, 100 millions of gallons of water may be easily procured, and at little expense. Of the necessity of such a supply, we need scarcely make any mention. The appalling facts connected with the late visitation of Cholera speak trumpet-tongued.

METROPOLITAN INTERMENTS.

A Bill is at length before Parliament, having for its object the making better provision for the interment of the dead in and near the Metropolis. We have not at present had an opportunity of reading it, and we are not prepared to say, whether it satisfactorily provides for the utter and entire abolition of intramural sepulture. Nothing short of this will remove the evils against which we have so often had occasion to inveigh. Whether, in order to insure the fulfilment of this grand *desideratum*, it may or may not be necessary that corpses should be taken possession of by the Government officials; and that the last sad privilege of preparing the lifeless body for its final resting-place should be transferred to strangers, we are not called upon to discuss. We have one paramount duty to perform with reference to the proposed measure, and that is, to do what lies in our power for securing its passing into a law in such a form as may best conduce to the amelioration and preservation of the public health. If, in order to effect this, we should have to support a change which may make the tears of mourners more bitter, we shall at least have the consolatory reflection, that they will be less frequent than under the present pernicious system of burying the dead among the living.

WILL THE CHOLERA RETURN?

The question has already been answered in the negative by an authority which, we believe, no one will be inclined to dispute,—that of Alderman Lawrence and his colleagues in the City Court of Sewers. A majority in this Court, headed by Alderman Lawrence, decided, on Tuesday last, that no money should be granted to Mr. Simon to obtain the requisite information respecting the state of health among the poorer classes. This will astonish no one who is acquainted with the opinions promulgated by Alderman Lawrence on all similar occasions. In every age, and in every country, we find a class of men firmly pledged to oppose anything like improvement, and glorying in the disrepute in which they are held by their more patriotic fellow-citizens. That their representatives in this City should now prove false to the line of conduct they have hitherto unflinchingly adopted, would be an inconsistency in favour of humanity, of which but few would have ventured to accuse them beforehand, and the result has, in this case, once more justified the assumption. The whole debate has been chronicled in the public journals, and will probably elicit the usual amount of "slashing articles" from the *Times* and others. Wrapped in the impenetrable armour of a profoundly rooted contempt for science and the interests of the whole human race, the worthy Alderman and his equally benevolent and enlightened colleagues prepare to face a storm of public indignation which would wither the soul of a generous and sensitive man.

As all our readers have not an opportunity of learning exactly what has taken place, we will lay before them a short sketch of this extraordinary affair.

Alderman Moon moved, "That 500*l.* should be granted to Mr. Simon, the Medical officer of the City of London, to obtain from the eleven Medical Officers of the several Unions of the City of London the largest and most accurate returns of all sickness occurring among the poorer classes," and this Motion was negatived by 19 against 9,—the high talent and skill of Mr. Simon having been at the same time deservedly eulogized. Among those who opposed the measure, Alderman Lawrence and Mr. H. L. Taylor especially signalized themselves by the lucidity and elegance of their remarks; and, as the opinion and reasoning taken up by men of such standing must ever be interesting to the admirer of genius and the friend of his species, we shall perhaps be excused for going a little into detail.

Alderman Lawrence naturally opposed the Motion because it was humane and business-like, on the three following grounds.—

1. He did not believe that people died of disease, but "of the doctor!"

2. That the Corporation ought not to be burthened with a medical staff, now that the cholera was gone!!

3. *That nothing was so completely calculated to bring back that and other fatal diseases as the appointment of a number of gentlemen of the Profession to look after the health of the people!!!*

As to the first ground, we have only to remark, that it will be well for Alderman Lawrence if he should never be attacked with cholera, for he will sink unpitied and unforgiven by an outraged and insulted Profession, or he will only be too happy to "die of the doctor." We shall, however, leave him to the enjoyment of his generous opinion. But one thing we would fain advert to. If Alderman Lawrence have a medical attendant, and this gentleman should deem it but justice to himself and the Medical Profession, to inform the Alderman that he can no longer continue to attend him, and the same intimation should be made by every other medical man to whom he may offer his patronage, we should soon, we trow, hear of a change in his opinion.

Secondly, we distinctly deny that the cholera is gone, as will any one who looks into the Returns of Mortality for the last six weeks.

The third idea is fully in keeping with those which the worthy Alderman is wont to emit; anything more erratic having never issued from the mouth of a man. That he does not wish to abolish every improvement of modern times, as gas, railroads, &c., we can only explain by falling back on the irrefragable fact, that no absurdity is too great, no contradiction too glaring, for the man who could state that Smithfield is not a nuisance.

Mr. H. L. Taylor "opposed, in the most urgent manner, the payment of any Medical gentleman for assisting Mr. Simon; and stated that, *by the acknowledgment of the Union Doctors themselves, the information required would be perfectly useless!*"

Let our readers understand us distinctly. We do most fully and solemnly disbelieve, that any Medical man ever disgraced himself by such an outrageous and unwarrantable assertion. Mr. Simon made too good use of the information obtained last year from returns of this kind, and Medical men are too philanthropic and sagacious for such fiction to find credence. A more preposterous violation of all that wears a semblance of probability has seldom been attempted. But we shall revert to this more fully in our next Number.

THE STUDENTS AND COUNCIL OF UNIVERSITY COLLEGE.

We have copied, into another part of our Journal, an extract from the daily *Times*. We have made inquiries among those likely to be well informed, without being able to ascertain any point in which the Correspondent of the *Times* has falsified the facts of the case. At the same time, we think some passages in his account indicate that it emanates from one animated by a spirit inimical to the Council of the College. We trust that the whole affair, most disgraceful to all parties concerned, will act as a warning both to the Students and Council. The students appear to have forgotten, that it is the duty of the Council to maintain the order of the College; that no insult can be offered to the most subordinate officer of the Institution without being indirectly an insult to the Council; and that those students who desire to pursue their studies in peace, even though they were but half-a-dozen, nay, even one, the Council are bound to protect against all interruption. The Council, on the other hand, appear to have forgotten, that the sure way to secure peace is not to create a riot; that when they call in the aid of Police to maintain order, they acknowledge their own incapacity for the office they have assumed, and, consequently, bring themselves and their office into contempt; that no Collegiate Institution

can exist, much less flourish, in which the members of the governing body do not, by the wisdom of their measures, the calmness and *justice* of their decisions, and the firmness of their conduct in carrying out those decisions, command at once the *respect* and obedience of those over whom they strive to exercise authority.

REVIEWS.

A Treatise on Diseases of the Bones. By EDWARD STANLEY, F.R.S., President of the Royal College of Surgeons, &c. P. 367. Longman.

Illustrations of the Effects of Disease and Injury of the Bones. By EDWARD STANLEY, F.R.S., &c.

[Second Notice.]

In the third part of this Treatise, Mr. Stanley considers tumours of bone. Having shown that an unobjectionable classification of the tumours of bone is, in the present state of our science, impracticable, Mr. Stanley limits himself to such an arrangement of the chief tumours of bone as shall facilitate their individual recognition.

To effect this practical object, Mr. Stanley first enumerates the principal products found in the tumours of bone; these are:—

1. Cartilaginous substance.
2. Osseous substance. Under this head are included not only substances possessing the characters of true bone, but also those friable, dull white, chalk-like tumours which are capable of being rubbed into a fine powder.
3. Encephaloid substance.
4. Fibrous substance.
5. Gelatinous substance
6. Fatty substance.
7. Soft and very vascular substance, of the character of erectile tissue.
8. Fluids of various kinds; sanguineous, serous, and gelatinous.

Melanosis, hard carcinoma, and tubercle are not enumerated in the above list, because they are not accompanied by enlargement of the bone. He then proceeds to offer a history of certain tumours which are definite in their characters and progress.

1. *Tumour of bone composed chiefly of cartilaginous substance; the Enchondroma of Müller; the Osteo-sarcoma of many authors.*—This tumour occurs before advanced age; its usual seat is the bones of the hands or feet, it frequently affects several bones at the same time. In size it may equal an orange. When connected with the larger bones, it usually grows from the outside, while it ordinarily originates within the smaller bones. In the latter case, the growth is globular, and consists of a thin, bony shell, enclosing the cartilaginous substance. In the former case the tumour is generally noduled, and divided into lobes united by fibrous tissue. The tumour yields chondrin, and not gelatine, on boiling. It is of slow growth, and purely local; its removal is not followed by its development in other parts. Central softening of the morbid growth, with ulceration of its coverings, sometimes supervene. Preparations of iodine or mercury, Mr. Stanley states, may effect the gradual dispersion of the tumour; and he adduces a cure in which the use of an ointment containing iodide of potassium, and afterwards iodine alone, excited the slow removal of a tumour of this description.

2ndly. *Of the Tumours of Bone composed chiefly of Osseous Substances.*—Mr. Stanley divides these into two kinds—exostosis, and the osteoid tumour.

Exostosis resembles true bone in every particular, microscopical and chemical. It occurs chiefly in persons before fifty. It is recognized by its hardness, freedom from pain, slow growth, the healthy condition of the surrounding parts, and the absence of constitutional disturbance. The basis of an exostosis is usually cartilage; the bone being deposited in the centre, and not on the outside of the cartilage as in enchondroma. The base, however, may be fibrous tissue, or the exostosis may be an outgrowth from, or hypertrophy of, a natural process of bone. Once formed, the base of an exostosis never increases in diameter. The breadth of the neck, however, varies much in different cases. In an ossifying enchondroma there are many points of ossification; in exostosis only one. Exostosis is constitutional, often occurring in several parts of the body at the same time. It is hereditary, children and parents being frequently similarly affected. Exostoses are injurious simply from the magnitude they sometimes attain, and the impediment they offer by pressure to the performance of the functions of the parts in their vicinity. A common seat of exostosis is the last phalanx of the great toe; when so seated it raises the nail, and projects from beneath it. When chiefly cartilaginous, diminution of an exostosis has been effected by the use of issues, friction and compressure, and the application of iodine and mercury; its removal is, in very rare instances, followed by its local reproduction. It is important to bear in mind, that exostoses sometimes suddenly cease to increase in size. Minute directions are given by Mr. Stanley as to the best mode of operating in cases of exostosis. The steps of the operation, the instruments required, and the modifications required by the situation of the tumour, are severally considered.

Osteoid Tumour.—This is a malignant growth, first described by Müller. It resembles, microscopically, true bone. Mr. Stanley has seen three instances of this rare affection. The following are given as its characteristic features:—

1st. The tendency to its growth around the lower part of the femur, just above the condyles, and around the upper part of the tibia, just below its head.

2nd. The tendency of the tumour to assume an oblong rather than a globular form.

3rd. The absorbent glands, when contaminated in this disease, assume the form of hard, isolated, and moveable tumours.

It is accompanied by the general cachexia indicative of malignant disease; and it proves fatal, either by the development internally of secondary osseous tumours, or by its constitutional effects.

Amputation is the only hope of relief. It must be performed early in the disease.

3. *Tumour of Bone, composed chiefly of Brain-like or Encephaloid Substance.*—A common disease before the age of 40. In some cases, it is of rapid growth, and accompanied by severe pain; in others, it increases very slowly, and the patient suffers, comparatively, no pain. It has its origin within the bone, the outer layer of which it may either expand or penetrate, by causing its absorption. The size attained by tumours of this description is often very great; the skin, in such cases, is enormously distended,—it inflames, ulcerates, and gives issue to blood, or a soft bleeding fungus.

The adjacent absorbent glands are not, as the rule, affected. The most common seats of this tumour are the condyles of the femur and the head of the tibia. It has frequently been mistaken for ordinary disease of the knee-joint. Osseous matter is often found in the encephaloid mass, either in the form of specks, fibres, or a network. In consequence of the vessels of the bone leading from the tumour being frequently unsound throughout the whole of the bone, Mr. Stanley lays down the following important rule,—that amputation should, if possible, be performed, not through the bone in which the disease originated, but either through the contiguous joint or above it.

Encephaloid tumours of bone frequently arise from local injury; the malignant disease manifesting itself when the slight inflammation, immediately consequent on the injury, subsides.

Mr. Stanley advocates the removal of the limb, if there is no evidence present that the internal parts are the seat of similar disease.

4. *Tumours of Bone, composed chiefly of Fibrous Tissue.*—These tumours, like fibrous tumours of the uterus, yield gelatine on boiling. Osseous matter is occasionally intermixed with the softer constituents of these tumours. In some instances, they exhibit a tendency to re-production, after their removal by operation. The upper and lower jaw, the humerus, femur, and scapula, are the most common situations of these tumours.

5. *Tumours of Bone, composed chiefly of soft gelatinous Substance.*—Under this head Mr. Stanley describes colloid cancer of the bones.

6. *Tumours of Bone composed chiefly of Fatty substance.*—The disease appears to commence in the deposit of a yellow substance into the medullary canals of the bone; subsequently its texture becomes converted into a soft, crumbling, greasy substance.

This disease manifests the worst features of malignancy.

7. *Tumour of Bone, composed of a soft, very vascular substance, having the characters of Erectile Tissue.*—This also is a rare disease. In internal structure it bears close resemblance to certain nævi, consisting, like them, apparently, of dilated blood-vessels, with a fibrous tissue occupying their interspaces.

The portion of bone from which this growth proceeds ought to be removed.

8. *Tumour of Bone composed chiefly of Blood.*—This tumour consists of blood inclosed in a cyst. The cyst being composed of the osseous substance and its periosteum, or of the periosteum and surrounding tissue. The tumour originates in the effusion of blood into the cancellous structure of bone; the cells enlarge, the septa between them are absorbed, and the walls of the bone are expanded. In some cases it appears to arise from external injury, causing rupture of a vessel in the cancellous structure.

Amputation of the limb is the only remedy.

9. *Tumour of Bone consequent on the production of Entozoa within it.*—Acephalocysts have been found in bones of every form. Echinococci have been recognised in the hydatids of bones, as in those of the human liver, urinary bladder, &c. Their presence in the osseous substance is usually followed by expansion of the walls. This tumour may be mistaken for malignant disease. In many cases, the diagnosis is most obscure. If the hydatids have escaped into the cellular tissue, suppuration ensues, and the disease may be taken for chronic abscess. This chapter concludes with some excellent general considerations relative to the diagnosis and progress of the tumours of bone.

The Third Part of the Work is divided into four chapters. The first and second treat of rickets and mollities ossium. With reference to the treatment of rickets, Mr. Stanley recommends, in addition to means for strengthening the system generally, friction of the distorted part, and especially free exercise of its muscles; increase of deformity being prevented by the judicious use of mechanical support. The apparatus employed, however, neither by its weight nor its mode of application, ought to restrict the free action of the muscles of the part which is the seat of the disease.

Chapter 3.—*Scrofula in Bone.*—Scrofulous affections of joints may originate in inflammation of the

cellular tissue around the joint in the synovial membrane of the joint or in the bones themselves. Scrofulous inflammation of bone is accompanied by expansion of its texture. The second stage of inflammation of scrofulous bone is the disappearance of its earthy matter, which is so complete, that the bone becomes readily compressible by the fingers. Subsequently tuberculous matter is deposited, either in a circumscribed cavity, hollowed out of the bone or diffusedly through its cells. At this stage the smallest amount of irritation is apt to be followed by suppuration and disorganization of the bone. The prognosis is favourable so long as the disease is limited to inflammation of the bone; but, when the stage of tuberculous deposit is reached, no other result can be looked for than destruction of the whole or part of the bone.

Mr. Stanley is strongly opposed to the employment of any depletory measures, to counter-irritation in all its forms, and to every kind of stimulating application. Absolute rest of the affected part, secured by means of suitable splints, the freest exercise of the body generally, and fresh air, especially sea air, are the only means of cure in which Mr. Stanley has confidence. He has no confidence in iodine or any of its preparations. Steel and cod-liver oil he thinks beneficial, by increasing the appetite and improving nutrition. They keep the disease in a quiescent state, not cure it. Sea air is evidently the remedy from which Mr. Stanley believes he has seen the greatest benefit in scrofulous affections of the joints.

The fourth chapter treats of hard carcinoma and melanosis. The former resembles in structure hard cancer of the breast. Melanosis is, according to Mr. Stanley, a growth *sui generis*, and not simply a deposit of pigment in other growths. It rarely occurs, he states, primarily in bone.

The fourth and concluding part of Mr. Stanley's Work is divided into four chapters.

The first treats of morbid growths from the jaw. He first describes disease originating in the gums, viz., epulis and epithelial cancer. The former appears to offer two varieties, the first being merely hypertrophy of the gum, the second consisting of dense fibrous tissue. The peculiar feature of epulis is its strong tendency to reproduction, if every particle of the growth has not been removed.

Epithelial cancer of the gum or adjacent mucous membrane, generally occurs before fifty. It commences as an indurated swelling, which becomes wartlike and ulcerated. The disease spreads slowly. The morbid structure is very vascular. The general health is unimpaired however long the local disease continues. The adjacent absorbed glands have a tendency to become diseased. Well-marked epithelial cancer cells are seen, says Mr. Stanley, when portions are examined beneath the microscope. Similar cells were found in a secondarily enlarged absorbent submaxillary gland.

Epulis and epithelial cancer require the same treatment, viz.—complete extirpation. It is essential that the surface of the bone to which they are attached be removed, including the alveoli, if the disease has extended so deeply. Mr. Stanley passes in review all the tumours he has witnessed connected with the lower-jaw. They include most of those common to all the bones. He then details the various steps of the operation required for their removal. The diseases of the upper jaw and their treatment, including those of the antrium, are given with equal care.

With reference to the treatment of disease of the spine, Mr. Stanley observes, one rule belongs to all, viz., to keep the diseased parts at rest, and to remove from them all weight and pressure by observance of the horizontal posture. And when ulcerative disease is seated in the bodies of the vertebræ, no restraint of position is to be imposed that can impede the approximation of the healthy vertebræ bounding the seat of the disease.

Local abstraction of blood is, if possible, to be avoided; although tenderness be present, yet now and then it is required. If there is acute inflammation, mercury is the remedy which exerts the greatest remedial power. With reference to counter-irritation, Mr. Stanley says he thinks it is of no benefit in scrofulous disease of the vertebræ, but very useful in other ulcerative affections of the bones of the spine.

Mr. Stanley is strongly opposed to opening psoas or iliac abscesses until just about to burst.

1st. Because the abscess may remain stationary for years, without injury to the health of the patient.

2ndly. Because the pus may be absorbed and the patient recover completely. On this point Mr. Stanley states he has no doubt, and he adduces cases in which such absorption of the pus evidently occurred.

In the third chapter of the fourth part—the last—Mr. Stanley considers diseases of the periosteum. Periostitis may, he thinks, arise from the action of the gonorrhœal virus alone.

The common constitutional state which give rise to periostitis, are syphilis, rheumatism, and scrofula.

Rheumatism gives rise to diffuse inflammation of the membrane; syphilis attacks distinct portions; scrofulous periostitis usually shows itself by a hard and painless swelling occupying the entire circumference of cylindrical bones.

For acute inflammation of the periosteum the remedies are, leeches, poultices, and fomentations, and the free exhibition of calomel and opium. For the less acute, iodide of potassium, in doses of two or three grains, three times a day, in decoction of sarsaparilla, a bitter vegetable infusion, or camphor mixture. The division of the inflamed periosteum is sometimes required. A short section on malignant disease of the periosteum concludes the work.

We have shown our estimate of this important contribution to the science of Surgery by the full analysis of its contents we have made. At the same time we are conscious that no analysis can give an adequate idea of the large amount of practical information this volume contains. No surgeon, however large his experience, but may improve his knowledge by a careful study of its contents. The illustrations are equally admirable, whether regarded as mere drawings or as accurate representations of particular instances of diseased structure.

BIBLIOGRAPHICAL RECORD.

Many friends having expressed the wish that we should acknowledge the receipt of the various publications we receive, we intimate our intention of doing so for the future. We may also observe, that, although we purpose to *review* in due course every work we receive, yet we may also, in our BIBLIOGRAPHICAL RECORD, occasionally adopt the plan of the late Dr. James Johnson, and append a short *notice* of the book to our announcement of its receipt.

Surgical Anatomy. By Joseph Maclise. Fasciculus V. (Churchill.)

Pathology of the Human Eye. By John Dalrymple. Fasciculus IV. (Churchill.)

Remarks on Epilepsy and Puerperal Convulsions. By George King, Esq., Surgeon to the Dorcas Charity, Bath.

Oppenheim's Zeitschrift fur die gesammte Medicin. Nos. 6 and 9.

Proceedings of the Obstetric Society of Edinburgh.

Treatise on Imposts levied on Port Wine. By Joseph James Forrester.

Statistics of Cholera. By Assistant-Surgeon Balfour, of the Madras Army. (From the Honourable East India Company).

Qualitative Analysis for Laboratory Practice. By Dr. Sheridan Muspratt.

Treatise on the Climate and Meteorology of Madeira. By Dr. Mason and John Driver, Esq. Edited by J. Sheridan Knowles, Esq.

The Treatment of Secondary, Constitutional, and Confirmed Syphilis, by a safe and successful method. By Langston Parke, Surgeon to the Queen's Hospital, Birmingham.

Sanitary Economics; or, Our Medical Charities as they are, and as they ought to be. By Alexander P. Stewart, M.D. (Nisbet and Co.)

[A pamphlet containing matter for earnest consideration, and well worthy the attention, not only of the medical man, but of the philanthropist and political economist.]

Kinesipathy; or, the Cure of Diseases by Specific Active and Passive Movements. By Augustus Georgie. (Bailliere.)

[This book is addressed to the "unprejudiced perusal of the philanthropist and the public." The denti-frangibulous term seems to be—we say *seems* to be, for what the system is the *brochure* does not tell us—a system of Swedish medical gymnastics, by which ulceration of the legs, opacity of the cornea, and deviation of the spine, &c. &c., are to be remedied.]

Exposition of a Plan for the Metropolitan Water Supply from the Thames at Maple-Durham. (Bailliere.)

London (Watford) Spring Water Company. Report to the Directors. By S. C. Homersham, Esq., C.E. (John Weale.)

[We must avail ourselves of an early opportunity to bring before our readers the important subject of the supply of pure spring water to the metropolis.]

The Druggist's General Receipt-book: comprising a complete veterinary formulary, and table of veterinary materia medica; numerous receipts in patent and proprietary medicines, druggists' nostrums, &c.; factitious mineral waters, and powders for preparing them; perfumes and cosmetics, beverages, dietetic articles and condiments; trade chemicals; miscellaneous compounds used in the arts, domestic economy, &c.; useful letters and memoranda. By Henry Beasley. (Churchill, London.)

[A good compendium with a long title, containing much that is useful to chemists and druggists, also to medical men, and especially to the domestic economist.]

Memoir on Turning, as an Alternative for Craniotomy and the Long Forceps. By J. G. Simpson, M.D., Professor in the University of Edinburgh.

[A reprint from the "Provincial Medical Journal" of a series of Papers, written during the Author's learned leisure on the coast of Scotland, in the Autumn of 1847. The Essay, which is confessedly unfinished, is intended for the Pupils of the Obstetrical Professor, in order to save time in the discussion of the subject in the class-room. It is very valuable, and, if completed and published—for we presume it is only for private circulation—would be an acceptible offering to the Profession.]

By the same Author. On the Detection and Treatment of Intra-Uterine Polypi. A reprint from the "Monthly Journal of Medical Science."

[Dupuytren, Bolvin, Ramsbotham, Mendé, Roche, Janson, and others, testify to the impossibility of ascertaining the presence of polypi included within the uterine cavity. Not so Dr. Simpson. The existence of polypi being suspected, he uses sponge-tents for dilating the uterine os and cavity to such an extent, as enables the practitioner "to introduce a finger into the uterine cavity for the purposes of diagnosis and operation in this and other diseased states of the organ." Twelve cases are related. The symptoms are uncertain and equivocal; and, in general terms, comprehend hæmorrhage, mucous, purulent, or serous discharges, increased size of the cervix and body of the uterus, and irritation and pressure above the rectum and bladder. Even "one or more of the preceding group of symptoms may be altogether absent, though the uterus contains an intra-uterine polypus."]

Hydrophobia Curable by using submersion. (Hodges and Smith, Dublin.)

[An anonymous proposal to employ in Hydrophobia the cold immersion recommended by Dr. Currie in idiopathic tetanus.]

The Pathology of the Kidney in Scarlatina. By James Miller, M.D. (T. and W. Boone, London.)

On Diseases of the Kidney. By G. Owen Rees, M.D., F.R.S. (Longman, London.)

[We propose shortly to review these Works.]

Evening Thoughts. By a Physician. (London: John Van Voorst. 1850.)

[This unpretending little volume is replete with the profoundest principles of intellectual and moral philosophy. We have seldom—*nullus in parvo*—met with any work demanding more serious reflection, yet, at the same time, so lucidly expressed, as to be unmetaphysical on many of the most metaphysical subjects. We shall return to it anon.]

The Purpose of Existence Popularly Considered in relation to the Origin, Development, and Destiny of the Human Mind. (London: Chapman. 1850.)

[The object of this very admirable little volume is to impress a popular conviction, that there is but one truth, whether in science, philosophy, or morals; and that to guide man to truth, is to guide him to order, intelligence, and happiness. It is well written; and we recommend it as a very able and argumentative work on many points which have called forth the talents of many of our ablest ethical writers.]

Contributions to Pathology; with introductory observations containing the Past and Present State of the Insane in Ceylon. By James George Davy, M.D., Licentiate of the College of Physicians of London. (London: Churchill. 1850.)

[We do not understand exactly the relation which exists between the title of this book and its contents: what mental pathology can have to do with the squabbles which took place between Dr. Davy, at Ceylon, and the authorities of the Lunatic Hospital in that colony, we are at a loss to conceive. It appears to us obvious, that Dr. Davy did not act prudently for his own interests in quarrelling with the Local Government; and the details he has given respecting his controversial position are neither interesting nor instructive to the Profession.]

An Introduction to the Study of the Mind. Designed especially for the senior classes in schools. By Daniel Bishop. (London, 1849.)

[Dugald Stewart long ago complained of the want of any elementary treatise on mental philosophy; which is here so very admirably supplied as to entitle this work to further notice. In the mean time, we recommend it to the attention of our readers.]

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

April 9, 1850.

Dr. Addison, President, in the chair.

THE LATE EXPULSION(a) OF A FELLOW.

The gentleman to whose case we lately alluded, was ballotted for and re-elected.

CASE OF SCROFULOUS ABSCESS OF THE ANTERIOR MEDIASTINUM.

COMMUNICATING WITH BOTH SIDES OF THE CHEST, THE TRACHEA, AND PERICARDIUM, AND FORMING A TUMOUR ABOVE THE CLAVICLE, SIMULATING ANEURISM OF THE INNOMINATA ARTERY OR ARCH OF THE AORTA.

By D. MACLACHLAN, M.D., Physician to the Royal Hospital, Chelsea.

An old soldier, sixty-one years of age, was admitted into the infirmary of Chelsea Hospital on the 5th January, 1849, with an elastic tumour of the size of a tennis ball immediately above the external end of the right clavicle, and dipping underneath this bone. It was free from pain, bruit, and pulsation. The carotid on that side beat feebly, and the pulse at the temple and at the wrist were scarcely perceptible. Deglutition was difficult, the voice husky and indistinct; respiration, at all times impeded, was occasionally asthmatic; an incessant teasing, dry cough prevented repose; the features were congested, the lips livid, and the external jugulars gorged. The patient was seldom free from pain in the back of the head, and pain with numbness, extending from the clavicle down to the ring and middle fingers of the right hand. Ten months before admission, he contracted a cold, and since then he had continued to suffer from a frequent cough, with increasing difficulty of breathing; but, though unable to work, he had never been obliged to entirely lay up. About three weeks before he was admitted into the Infirmary, the tumour suddenly appeared, after a violent fit of coughing. It was then not much larger than a marble. The whole of the right side of the chest, anteriorly and posteriorly, was unequivocally dull on percussion. Some fulness existed in the right infra-clavian region. Altogether, the physical signs pointed to extensive effusion into the right cavity of the chest; yet there were circumstances, the author observes, and refers to in a subsequent portion of the paper, rendering a positive declaration of this hazardous. The precordial region was extensively dull. There was no perceptible impulse of the heart, and at no period were its sounds audible. No alteration took place in the physical phenomena. Rather suddenly, about three weeks after admission, the respiration became more embarrassed, and the spasmodic fits of difficulty of breathing more frequent and severe. The expectoration was mixed with florid blood, but still catarrhal till a week before death, when it became purulent. Some fullness was observed along the lower part of the right side of the neck on the 28th January, extending backwards. Neither in this swelling, nor in the circumscribed tumour itself, was there any impulse communicated on coughing. An exploring needle having detected pus, a small opening was made in the tumour on the 30th January, and exit given to two or three ounces of sero-purulent curdy matter. The patient now rapidly sank. On the day after the operation his breathing was freer. Each fit of coughing was accompanied with a jet or gush of sero-purulent matter from the opening. The right side of the chest, from the clavicle to the nipple, regained its lost sonoriety in a remarkable degree, and the respiration in the apex of this lung became puerile. Death happened on the 7th of February. On opening the chest, the anterior mediastinum was found enormously thickened, and, in the centre of the diseased mass, an almost empty abscess, of the size of a billiard-ball, was observed. This abscess communicated, by several fistulous openings, with the right side of the chest, and with the pericardium by an ulcerated perforation of the size of a fourpenny-piece. It also communicated with the tumour or abscess in the neck. Several fistulous openings also existed in the trachea. The innominata and a considerable portion of the right subclavian were imbedded in the indurated mass. The right side of the chest contained several pints of sero-purulent fluid; a small quantity lay in the left side, and the pericardium held about a pint. The author was induced to submit this case to the Society, on account of the many points of interest it suggested for the consideration of the physician, the surgeon, and the morbid anatomist, as well as on account of the comparative rarity of the disease. He proceeded to review the history of the case, and to point out the peculiar difficulties attending the diagnosis. He noticed the difference in the symptoms from those of acute mediastinal pleurisy, ending in suppuration; and also the characters which distinguished the case from cases of intra-thoracic aneurism, finding its way outwards; as well as from cases of malignant disease of the lung, with corresponding tumours in the neck. The author purposely omitted entering into the details of the treatment pursued. Diuretics were prescribed, and sedatives ordered, with the view of removing the fluid from the chest, and relieving the cough, but without the least benefit; opiates, instead of allaying the cough and difficulty of breathing, were so positively injurious that they had to be discontinued. A few general observations concluded the paper.

Dr. Addison inquired of the author the precise condition of the lung through which the abscess had burst.

Dr. Maclachlan replied that it was quite shrunk up, except at the upper portion, which was healthy.

Dr. Addison had inquired because pressure on the current, causing difficulty of breathing, produces inflammation of the lung, and subsequent gangrene. He had seen three such cases; one of them last week. There was extreme difficulty of breathing, with aphonia; there was not any difficulty in swallowing. He was led to the belief that there was an aneurism, and this was found to be the case at the *post-mortem* examination. There was an aneurism at the commencement of the descending aorta, involving the pneumo-gastric and recurrent nerves. The muscles of the larynx were much wasted, and the lungs were inflamed.

Dr. Mayo inquired if the upper part of the lung were emphysematous.

Dr. Maclachlan, in answer, said that it was quite healthy, with the exception of a few tubercles.

Mr. Bossey related a case which presented many of the symptoms of phthisis; but there was a peculiar bruit heard in the breath of the patient, of which the man himself was conscious, and which was synchronous with the arterial pulsations. It was heard only when the mouth was open, not when it was shut, nor was it heard at the heart, nor anywhere in the chest. The *post-mortem* examination showed the arteria innominata imbedded in a scrofulous mass, arising from the anterior mediastinum. He (Mr. B.) had not heard this peculiar bruit in any other instance.

Dr. Sibson mentioned, that in cases of effusion into the cavity of the pleura, when the lungs can at all expand, a deep inspiration will cause the side to move. If the lung cannot expand, all the effort is spent on the unaffected side. This is a diagnostic sign as to the state of expansibility of the lung.

Dr. Mayo remarked, that the therapeutics of this case would aid the diagnosis. Sedatives not being of use, would tend to show that there was not any aneurism, because that which tends to quiet the circulation, would also quiet the aneurism, on the same principle that emotions of the mind sometimes cause them to end fatally.

CASE OF MOLLITIES AND FRAGILITAS OSSIUM,

ACCOMPANIED WITH URINE STRONGLY CHARGED WITH ANIMAL MATTER.

By WILLIAM MACINTYRE, M.D.

The subject of this case was a tradesman, aged 47. When placed under the author's care, in October, 1848, he was confined to the house with severe pains of the chest, back, and loins, from which he had suffered more or less for twelve months. Latterly, the pains had increased in severity, and were now so excruciating, under every movement of the trunk, that it was not without much difficulty and torture that he could assume, or for any length of time maintain, the erect or sitting posture. The patient dated his illness from the occurrence of a strain of his body, fourteen months before, while springing out of a narrow passage, when he felt, on coming to the ground, as if something had snapped or given way within the chest, and for some minutes he lay in intense agony, unable to stir. The pain soon abated, and eventually almost entirely left him; but after the lapse of a month, he was suddenly, and without apparent cause, seized with acute pain in the chest, which was considered to be inflammatory. Abstraction of blood from the arm relieved him, but was followed by great weakness, from which he had imperfectly rallied, when he was laid up by a second and more severe attack, which was treated as pleurisy. The relief obtained from bloodletting this time was less than on the previous occasion, while the prostration which followed was much greater, and went on progressively increasing, with continued wasting, loss of colour, and puffiness of the face and ankles. He was then put upon a course of steel with quinine, under which, and a residence on the sea-coast, he improved rapidly, and for some time was capable of taking active exercise in the open air. This favourable progress was suddenly arrested by an attack of diarrhœa, which proved obstinate, and again reduced his strength. In September he returned to town, much debilitated, but free from excruciating pains, till within a few days of his being seen by the Author, when they had assailed him in their former intensity. He was, however, quite free from fever, and had no thirst; but his appetite was keen, sometimes, indeed, voracious. The urine was reported to be natural in quantity and appearance; but, on being examined by the Author, it was found not only to contain an enormous amount of albuminous matter, but to present, with the usual tests, re-actions of an anomalous and remarkable kind. 1. Treated by heat, this urine gave no indication of the presence of albumen at the ordinary coagulating temperature, 160° or 170°, and preserved its fluidity till the boiling point was reached, when it became hazy, then gelatinous, till, under prolonged exposure to the high temperature, it acquired a horny consistence. The material thus disengaged exhibited the characteristics of albumen. 2. Nitric acid caused no immediate precipitation; on the contrary, the urine, if previously turbid, became instantly clear, and retained its transparency and fluidity for an hour, or longer, when it was found to have consolidated into a firm, yellow mass, which, unlike a coagulum resulting from the action of nitric acid on serum and ordinary albuminous urine, underwent complete solution on being heated, but again formed on cooling. These unusual phenomena continued to characterise the urine throughout the subsequent progress of the complaint, to its fatal termination, which took place two months from the time the patient came under the Author's care. Several eminent physicians were consulted on the case, but without their being able to throw any light upon its nature, or to alleviate materially the patient's sufferings, which were extreme. On inspection after death, the ribs were found to be in a state of softening and fragility, admitting of being easily cut by the knife, and readily broken by moderate force. The sternum was in the same condition, first bending and then snapping across when raised and turned back. The spine, throughout its cervical, dorsal, and lumbar divisions, had undergone a similar morbid transformation. The external laminæ of the diseased bones were of a reddish colour, and atrophied; their interior loaded with a red, pulpy, and unctuous material, like that found occupying the cancelli of the long bones of the ex-

(a) We understand that the authorities of this Society object to the use of the word "expulsion," as applied to the late ejection of a Fellow for non-payment of his subscription. We used the word as being the readiest and the one most truly expressing the nature of the process. It appears that the Council have the power of erasing the name of a Fellow who allows an anniversary meeting to pass without paying his subscription for the previous year, without there being any appeal to the Fellows at large. This proceeding they adopted in this case; but the erasure of the name, they say, is not an "expulsion." So be it: it so closely resembles it, that we can hardly see the difference.

tremities, when they are affected with this disease. With the lumbar vertebræ the disease seemed to have stopped, for the bones of the pelvis resisted the knife, and presented no notable deviation from their natural appearance. No material lesion was found in any of the thoracic or abdominal viscera, and it was particularly remarked that the kidneys were perfectly sound. From the minute anatomical examination of the affected bones which was made by Mr. Dalrymple, it would seem, that the disease had commenced in the cancellated structure, but that the external laminæ were also involved. The red substance filling the large cancellous cavities in the interior was found to be composed of granular matter, oil globules, nucleated cells, a few caudate cells, and blood discs extravasated among the other cells. This description accords with Mr. Birkett's account of the appearances he observed in the case detailed in the Society's *Transactions* by Mr. Solly, and seems to point to a disease essentially malignant in its nature, but differing, in some special particulars, from the true malignant disease of bone, as we are accustomed to regard it. Analyses of the urine were separately made by the late Dr. Prout and by Dr. Bence Jones, both of whom had seen the patient with the Author and Dr. Watson. Dr. Prout was led to infer, from his investigation, that the animal matter present was albumen in some peculiar state of combination or condition. He had found albumen in this state in the urine before, but never in such large quantity. This opinion was strengthened by the more elaborate analysis by Dr. Bence Jones, already published in the "Philosophical Transactions" for 1847. He succeeded in separating from the urine a substance which exhibited, among other characters, the peculiar re-actions with nitric acid, which were so strikingly seen in the early experiments. Upon ultimate analysis, this new substance he determined to be a hydrated deutoxide of albumen. The author —after referring to the familiar fact, that in softening of the bones, occurring as an active disease in the adult, the earthy matter of which these structures are despoiled is excreted along with the urine—regards the present case as an evidence that, in an opposite condition, fragility of bones, the animal constituents are in like manner absorbed and carried out of the system. Under this impression, he gives a detailed account of the re-actions of the morbid urine, hoping that a knowledge of these may assist us in recognising this formidable malady at an early period of its invasion, before it has arrived at its stage of full development and incurability.

Dr. Addison remarked that this case would show that a very great abundance of albumen might be carried off by the kidneys, without their being in other than ahealthy state,—a fact which is not in accordance with preconceived opinions.

WESTMINSTER MEDICAL SOCIETY.

April 6, 1850.

Dr. Murphy, President, in the Chair.

Dr. Tyler Smith read a paper on

THE PRESUMED FREQUENCY OF ULCERATION OF THE OS AND CERVIX UTERI.

Referring to the frequency with which Mr. Whitehead of Manchester, Dr. Henry Bennet, and some other writers, have found ulceration of the os and cervix, Dr. Smith asked the important questions,—Does this greater frequency of ulceration, as compared with the opinions of previous authorities in this country, depend upon the better methods of examination now in use; or is there some mistake as to what really constitutes ulceration of the uterus? Dr. T. Smith quoted, from Dr. Bennet's work, a declaration, that out of 300 cases of uterine disease coming promiscuously before him, at the Western General Dispensary, no less than 222 were suffering from ulceration of the os or cervix! This excessive frequency of ulceration, Dr. T. Smith declared to be contrary to his own experience, though he used the same methods of investigation as those practised by Dr. H. Bennet. Upon a close analysis of Dr. Bennet's descriptions of uterine ulceration, Dr. T. Smith showed clearly, that the term "ulceration" had been used in a very loose manner, and that, in particular, "excoriation," "abrasion," and "granulation," had been incorrectly called forms of "ulceration." The Author admitted, that excoriation, abrasion, granulation, congestion, &c., were very common in leucorrhœal affections; sometimes as a cause of leucorrhœa, and sometimes as a consequence, from the irritating discharges dissolving the epithelium, and leaving the mucous surfaces abraded, but he denied that true ulceration of the os and cervix existed in any but rare cases in a non-malignant and non-syphilitic form. In ulcers of the intestines, stomach, bladder, and other internal organs, there was no mistake when ulceration really occurred. In the uterus itself it was sometimes seen eaten away by corrosive ulceration. But the condition of the uterus in leucorrhœa was altogether different. There was seldom a true ulceration in these cases. The os and cervix uteri might be compared to the throat, which, in few persons, would be found perfectly healthy. The granulations often found at the os uteri might be compared to the *granular conjunctiva*, which secreted pus, but was not really ulcerated; the granular os and cervix would be a more correct definition than the ulcerated os and cervix in such cases. A true test of the frequency of uterine ulceration would be afforded by post-mortem examinations. At St. George's Hospital, Mr. Pollock and Mr. Gray had examined the uterus in nearly five hundred women with the greatest care and minuteness, and had only detected ulceration in seven cases, and these were chiefly scrofulous. The Author dwelt upon the importance of a correct nomenclature, and considered that the term "ulceration" so profusely and improperly used in the present uterine mania, led, on the one hand, to the abuse of specular examinations, and on the other, to heroic and often dangerous methods of treatment. Women were erroneously told they suffered from "ulceration;" and there was no amount of manipulation and torture to which they would not willingly submit, to be freed from so dire an evil. A most cautious and careful revision of the fashionable doctrines respecting leucorrhœa and uterine ulceration, was imperatively called for. Constitutional treatment was now more completely sacrificed to topical treatment, then the local methods of treatment were neglected by those partisans of Abernethy, who pushed his doctrines of the constitutional origin of local diseases to an absurd excess.

In the discussion which followed, and in which Drs. P. Tilt, James Reid, King, Ryan, and Murphy, and Messrs. Hird and Chippendale, took part, frequent and approving notice was taken of the review of Dr. Henry Bennet's work in the *Medical Times*.

CORRESPONDENCE.

SELF-SUPPORTING DISPENSARIES.

[To the Editor of the Medical Times.]

Sir,—The Profession owes you much obligation for opening your pages for the free discussion of that question now agitating the medical world, namely, Self-supporting Dispensaries. Comparatively new, at least in its application in London, where so many free and other dispensaries, the reverse of provident, exist, it is a subject which requires careful consideration and discussion, lest too zealous support on the one hand, and too capricious an opposition on the other, should lead to an ill-matured development and consequent failure. It is a great principle at stake—one which, if successful, must surely lead to the benefit not only of the working classes themselves, but also to the advantage of the medical man, whose laborious exertions are utterly disregarded; if the converse, to the utter disintegration of fair and upright dealings, or the moral improvement of the poor.

Since the publication of Dr. Stewart's very able pamphlet on Sanitary Economics, and in my endeavours to apply the self-supporting principle in the dispensary with which I am connected, I have given the subject much careful consideration, and, under the circumstances, I venture to solicit a small space in your journal for the development of those views, which have appeared in my humble judgment to be best calculated to advance the object in view. I do so in a fair and impartial spirit, more with a view to elicit discussion than to inculcate my own views for adoption; nay, I acknowledge my readiness to sacrifice these the moment that better suggestions are made.

I believe that dispensaries, in their constitution, have eminently in view the relief of those of the sick poor, whose circumstances are so limited that they are unable to pay for medical advice. In addition, the system of home visitation has been established, in the intention of enabling poor patients to obtain efficient medical aid without undergoing the necessary penalty of separation from their families by admission into an infirmary or hospital. The system of parochial out-door relief has the same twofold object in view. There is, however, this difference, that, as a rule, the patients attended from a dispensary are not so generally of the pauper class; and though poor not always requiring parochial relief. Many are members of Friendly Societies or clubs, from which they receive an allowance during illness. But, on the other hand, some of the patients, and this includes nearly one-half the number attended, are not such as the original intention of these institution ever contemplated to relieve. Many of these are in comparatively easy circumstances, being small tradesmen, mechanics of a higher order, and gentlemen's servants, frequently enabled, on the recommendation of the medical attendant, to procure expensive articles of diet with facility. From a list selected indiscriminately of those patients I have attended at home, most of which I recorded from memory, there are many who could have contributed from five to two guineas with ease; many who were in the habit of employing regular practitioners, and of paying them, but who, through their friends, having been induced to try the dispensary, always sought relief from it in succeeding illnesses. I find that this is the common case in all dispensaries. Dr. Stewart has forcibly stated the fact in his pamphlet; and all those medical officers of public charities, without a solitary exception, whom I have questioned on this point, have invariably confirmed it by their experience.

Among no class of patients, however, is this unfair advantage more frequently taken than among the midwifery patients. I speak here from experience. Some years ago, when a student, I frequently attended midwifery cases from dispensaries, and from University College Hospital. I could reveal many a tale—numerous instances, where I subsequently became convinced that by this attendance vice had been directly encouraged. To do so, however, might be thought wrong. Apart from this, I may say, that many of the patients so attended were in apparently easy circumstances, and several (more especially those I have attended during their first labours) have returned to me in a year or two after, offering me as much as one or two guineas, provided I would consent to attend them again. If I have refused, they have again had recourse to a dispensary or hospital, pleading poverty as the excuse for their conduct. These examples have been met with, I believe, by every young practitioner, and show that the patients are so demoralised as greatly to prefer taking advantage of a charity under the false pretence of poverty.

Lastly,—After the letters published in the *Morning Chronicle* and the City Missionary Reports, it will be sufficient to recall to the memory the fact I believe universally admitted, that the wholesale system of gratuitous relief now in vogue, is, in a vast majority of cases, attended with the most pernicious results to those persons who receive it, making them lose all honourable feeling of independence,—encouraging habits of idleness in many who, without this tempting bait before them, would seek, and be compelled to work,—attracting hundreds to this metropolis, where promiscuously men, women, and children, harbouring in haunts of misery and vice, are led insensibly, yet irresistibly, to actions the most desperate and crimes the most atrocious. Lying-in charities may be, in many cases, the first step to misery and crime; but who will pretend to say, that in an equal number of cases the ordinary gratuitous medical relief, so shamefully abused, may not have the same unfortunate tendency to crime!

Such being the case, it follows that the present system of dispensary practice is radically bad. It has the corrupt tendency to demoralise the poor, and as such should be reformed.

1. *A priori*, there are some evidences to justify the inference, that a demand of some slight remuneration on the part of patients attending Dispensaries might be attended with success.

a There exists among the poor a strong prejudice against parochial medical relief. I would not be here understood at all to detract from the merit due to our parochial Medical Officers for their unremitting devotion and attention in visiting the sick poor, more especially if this zeal on their part be coupled with the very small remuneration generally afforded to them in return. But this prejudice against the parochial medical relief, I believe, does exist in the minds of many of the sick poor. It may originate in the same feeling which makes them averse to the workhouse, or parish infirmary. There necessarily must be a degree of surveillance exercised over them which they do not like, and which leads them to believe they are not equally free in their actions. Certain it is, that in the vast majority of cases reference is only made to the parish for medical relief where dispensary or hospital assistance, first sought for, cannot be obtained. This shews that there is an equally strong prejudice among the poor

in favour of our dispensaries, which, if encouraged, by rendering the access to them more easy to the deserving poor, which, I presume, a slight premium would effect, might be attended with advantage to the dispensaries.

2. I believe all Medical Officers connected with dispensaries have reason to know that many patients would gladly avail themselves of the opportunity of purchasing letters were it afforded them. There are periods, it is true, immediately after the annual subscriptions are paid, when dispensary letters are obtained with comparative ease; but, and this more especially during the Christmas season, and at Midsummer, when the Governors are either out of town, or have exhausted their letters, patients have sometimes called upon thirty or forty Governors in the course of two or three days, without being able to obtain a letter. This search, of course, involves a great deal of fatigue and loss of time; and in many cases, where parents are seeking to obtain letters for their sick children, their time being so employed they are prevented from going to work and pursuing their usual labours, and thus lose more in this manner than treble or double what might be the real value of these letters.

3. As far as the finances of dispensaries are concerned, they are not usually in a flourishing condition. Recourse must be had to balls to delude persons into supporting a dispensary, by furnishing them with some amusement in return. The Church must be continually appealed to for some assistance. Committees are well aware of the difficulty of even retaining the same amount of subscription every year. What does all this prove? That people are getting tired of giving continually to support Institutions, the number of which is daily increasing, without apparently remedying in the least the distress and wants of the poor.

These three circumstances all seem to point out the necessity of adopting some plan by which these Institutions, when reformed, shall be made to support themselves.

To effect this, I have heard of three plans. *The first*, the payment of 6d. or 1s. on the presentation and registry of every letter, by which payment it has been supposed that an annual income, varying from 100*l.* to 500*l.*, according to the number of patients, would accrue to the dispensary, which, together with the voluntary subscriptions from benevolent individuals, would be sufficient to cover all expenses. The general feeling, however, appears to be averse to this suggestion, as it might be displeasing to many of the Governors, on whom the onus of this registry would frequently fall; and in this manner act to the injury of any dispensary that might adopt it, by diminishing the number of subscribers.

A second plan was, that, without interfering at all with the usual number of letters granted to Governors, a certain number of other letters should be given to each Governor, as also left at the dispensary, recommending poor persons for the purchase of ordinary letters at a price varying from 6d. to 10s., at the discretion of the recommending Governor, or Medical officer in attendance (who, it was supposed, might be better able to judge of the patient's circumstances), and, on presentation of which, a patient would be entitled to obtain Medical advice for a month.

This suggestion, it was supposed, would prove inconvenient in its working. The difficulty of fixing the price; the ill-feeling, in particular, that it might give rise to against the Medical Officer; and the probability that the onus of this payment might also occasionally fall on the Governor, were circumstances that seemed to point out the impropriety of adopting it.

The third is Mr. Smith's plan, a short summary of which I here annex.

Every dispensary consists of three classes of patients:—

1st. A free class, consisting of labourers wishing to subscribe something for themselves, admitted on the recommendation of a clergyman and of two respectable householders, and if a servant, of his or her master or mistress. The members of this class are furnished with *blue tickets*.

2nd class, or charity patients, not able to subscribe for themselves, but recommended by the honorary subscribers of the Dispensary. The members of this class to be furnished with a *white ticket*.

3rd class, or parish paupers, unable to subscribe for themselves, but admitted by a contract with the overseer, by whom they are to be furnished with a *yellow ticket*, entitling them to admission.

The funds of the Dispensary are derived from three sources.

1st. From the subscriptions of the free class.

2nd. From the subscriptions of benevolent individuals.

3rd. From the sums paid by the parishes.

Free members contribute a certain weekly sum. Honorary subscribers are allowed to recommend one patient for every half-guinea subscribed. Parishes contribute according to their respective population. The rate of contribution for a free member need not (Mr. Smith believes) exceed 4s. 4d. per annum, or 1d. weekly; collected weekly, monthly, or quarterly. The free members are entitled to priority of attention, and to choose the medical officers by whom they should wish to be attended. The surplus so paid, over and above the expenditure, is divided among the medical officers, proportionally to the number of sick attended by each.

Through the kindness of Mr. Smith, and another friend who furnished me with the Reports of some of the Provident Dispensaries, I am enabled to make the following statements:—The most satisfactory results have attended the establishment of these dispensaries in Southam, Atherstone, Wellsbourne, Chilvers Coton, Coventry, and Birmingham.

The first report of the Atherstone Dispensary showed a balance of 80*l.* in favour of the Dispensary. The free members amounting to 784 the first year, had increased the next year to 1214.

At Chilvers Coton, in Warwickshire, it is stated that out of a class of the population of that district, previously supposed to have little desire to make any exertion to become in any degree independent of parish relief, no less than 600 individuals have been admitted free members of the Dispensary.

The Report of the Dispensary established at Wellsbourne, Warwickshire, was equally gratifying. Of 1223 patients, only two or three had applied for the white or charity ticket, a circumstance, remarks Mr. Smith, strongly illustrative of the desire of honest English labourers to be independent, where an opportunity is afforded them of providing against sickness and necessity, by a small contribution from their earnings.

The fourth Report of the Royal Victoria Dispensary, Northampton, shows that the number of free members had increased from 2424 to 2620, and their contributions, inclusive of midwifery fees, from 263*l.* to 343*l.*, and this at a time of general distress, 1847—8, and in a dispensary of which the annual income, exclusive of balance, was 750*l.*, only 200*l.* of which were contributed by benevolent individuals.

The Coventry reports give the following statistical data, which are important as bearing upon the general influence on the moral condition of the poor, by provident Dispensaries.

Abstract of the Reports of the Receipts of the Coventry Provident Dispensary.

Honorary Subscriptions.	Free Members Subscriptions.	Patients treated.	Year.
£ 59 13 6	£451 3 11	2040	1846
56 0 6	435 8 1	2193	1847
58 2 6	410 15 7	2044	1848
65 3 4	376 12 0	1878	1849

It may be stated, lastly, as illustrative of the advantages of these Dispensaries, very few of which are yet formed, (about half a dozen,) that 10,000 families, formerly paupers, have become inscribed among the free or self-dependent members, and that as many more have been prevented from becoming paupers.

These instances, recorded (all except the Coventry) from information afforded me in a correspondence with Mr. H. L. Smith, of Southam, are most important; as they reflect credit and honour upon that gentleman, who, for the last thirty years, has occupied himself with the subject of Provident Dispensaries; having foreseen — and endeavoured to prevent—the baneful influence of dispensaries, as at present generally founded, and to which, of late, our attention has been specially called by Dr. Stewart's most able pamphlet on Sanitary Economics.

Reviewing the last facts enumerated with those first stated, I think every honest man must admit, that the principle of self-supporting dispensaries is good, and that that of the present dispensaries is defective.

The only question, however, that offers itself is this:—How are they to be established,—as separate establishments, or by engrafting the principle into those ordinary Dispensaries already established in the metropolis? I think I shall best prove the latter point by meeting, *seriatim*, the objections that I have heard raised. To the consideration of these I shall address myself next week.

I have the honour to be, Sir,
Your obedient servant,
C. H. F. Routh, M.D.,
Physician to the St. Pancras
Royal General Dispensary.

19, Dorset-square, April 15, 1850.

INCORPORATION OF THE GENERAL PRACTITIONERS IN THE COLLEGE OF PHYSICIANS.

[To the Editor of the Medical Times.]

Sir,—Like most members of the Medical Profession, I have long desired to see some steps taken to lead to an efficient reform of those evils under which we are labouring, and have regretted to find no proposal which had the advantage of being perfectly feasible, and of being recommended by men in authority likely to carry that weight with the bulk of Practitioners which the state of things demands. It appears that, in the solution of the problem, there are two main points to be attended to,—the requirements of the old institutions and corporations, and the claims of the great mass of the intelligent Practitioners of this country; and, unless we can succeed in reconciling their respective demands with the spirit of history as well as with the spirit of the times, we shall not benefit the interest of our noble art and science by any change that may be effected. The question is one of deep and extensive import; and though one to which I have long turned my attention, I should not trouble you with this letter and with my remarks, were it not that in the excellent article on the College of Physicians, given in your paper this week, you appear to hint at the only solution which I think meets, or can be made to meet, all the requirements of the case. The public mind is fully alive to the necessity of Medical legislation; and I think, that if a proper plan, and one not offering insurmountable difficulties, be presented, it would willingly be adopted by opposing parties. On the perhaps mistaken supposition that our views agree, I beg you to read the following remarks, which I shall be happy to develope more fully, for the purpose of publication in the *Medical Times*, if you think that the suggestion is likely to be supported.

We have at the present moment three corporations in London which confer the *licentiam practicandi*. Whatever "Ιατρος" may say, these bodies have no other power, and not even the College of Physicians should be confounded with a University. The distinction between an University degree—essentially an honour bestowed upon theoretical acquirements—and the permission to practise, appears to be sufficiently obvious, and to you who are so well versed in the political history of Medicine, I need say no more about it. But the quintessence of the reform question, as regards the bulk of the Profession, is not one affecting the University degree, but the question of license. The two points must not be mixed up together. I dwell upon this simply to obviate the misapprehension, that I wish in any way to limit or circumscribe the honourable ambition of the student; my object not being to mark out a course of study, but only to show by what means we may adapt the existing institutions to the present wants. Why is it that the General Practitioners demand the establishment of a new corporate body for themselves? Because they feel themselves to be occupying an anomalous position. The great majority of them are, and all ought to be, gentlemen, if not by birth, still by education; the present state of things requires them to be, to a certain extent, shopkeepers. On the other hand, they are almost all members of a Corporation, which gives them a license to practice the very branch of the Profession which is, more particularly, a *specialité*, and which nine-tenths of them are never called upon to exercise to any extent; in fact, the General Practitioners are *not Surgeons, but essentially Physicians*, not *Doctores Medicinæ*, as you would say, but *medici, scilicet, qui arti medendi incumbunt*. If then, this be admitted, as it undoubtedly is admitted; and if we also admit, as it is admitted by the present generation of General Practitioners, that the dispenser's duties are not, in a civilised country, necessarily, or even desirably, a portion of the practitioner's duties, I think we cannot but arrive at the conclusion, that the true licensing body for the General Practitioners, the true College of the General Practitioners, is to be found in the "venerable" institution which dates back to the first half of the sixteenth century, and which, undeniably, has the chief claims to be considered as the head of the Profession. I discard the doctrine of Purism (a) in our Profession as an inherent principle, and consider that the College of Physicians might, by opening its portals to the General Practitioners, disperse the clouds that now hang over us, and, by holding up the banner of Medical Reform, cause a great and durable advance in the true interest both of science and the Profession. If the College does not choose to take some step of the kind, I, for one, am prepared

(a) I certainly am a Purist as regards the separation of dispensing and healing, except in exceptional cases.

to see it crumble gradually into decay; but, if it would adopt the initiative, I conceive that it would be readily supported by the General Practitioners, and there would then be some prospect of the Medical Profession constituting itself into one of the most powerful and influential bodies of this all-powerful country,—commensurate, indeed, with the intelligence and excellence of its members. Look at the great reforms of the present day; is it not delightful to trace so many of the most valuable boons conferred upon society, to individual members of our glorious Profession? what should we be if we could command that respect as a body which I think I may safely say, the majority of its individual members possess relatively? We should hear no more complaints about the inadequacy of medical representation, of medical legislation, of sanitary measures,—at least, we should then possess the means of rectifying abuses which now are beyond control. To mention a single abuse, but one that preys on the very vitals of the Profession,—who now can deal with quackery as it should be dealt with, who can sufficiently stem the flood of ignorance that is overwhelming the country, in the fantastic or grovelling shapes of mesmerism and homœopathy; and what power could resist the moral influence of a united Medical Profession? It is because I love my Profession, and see so much that is noble in its members, that I desire to see it occupying a status such as it will only acquire by asserting its dignity itself. In this country, above all others, historical associations carry a weight which nothing but absolute and total inefficiency can counteract. Therefore it is that I desire to see the College of Physicians take the lead; and I assert, that conservative feeling is so dominant in an Englishman's breast, that I have no hesitation in saying, that the General Practitioners would willingly forego their separate endowment, if, with a proper regard to their claims, as well as to the claims of the present members of the College, a compromise were effected, by which the former became *de jure*, as they are *de facto*, physicians. To render this possible, it would be necessary, in the first instance, to bring a Bill into Parliament, for the purpose of extending the jurisdiction of the College over the whole of England and Wales. I would then give the College the power of licensing all (a) who desired to practise Medicine, including those branches of Surgery which every medical man is sometimes called upon to practise, and Midwifery,—the Fellowship of the College being reserved for those who desired to devote themselves more exclusively to the pursuit of the science of Medicine, or to consulting practice. It would be vain to deny, that already the barriers between the Physician and the General Practitioner have fallen,—many of the latter having ceased to dispense their own medicines,—many of the former (and great names among them, too,) to see patients for the legitimate Physician's fee. If then, such is the case, and there is a yearning among all the enlightened members to establish real unity, why not demolish the remaining obstacle, and render it illegal for the members of the Profession to make a mere trade of it, and to profit by the sale of drugs? The patients, as well as medical men would gain, and, by the higher standing that the latter would assume in every point of view, they would more efficiently counteract the influence of quackery than can now be done, or than could be done by mere legal enactment. There is a quaint proverb in German, which applies well to ourselves:—

Lasst uns besser werden, dann wird's besser seyn;

or, in the better known and often abused dictum:—

Aide toi et Dieu t'aidera.

I have already, however, written more on the subject than your readers will probably care to read. I most confidently leave the matter in your hands. I have read many of your Articles with much interest, and I am much mistaken if the *Medical Times* is not destined to be a mighty engine in the Profession.

I am, &c.,

Ed. H. Sieveking, M.D.

3, Bentinck-street, Manchester-square.

THE COLLEGE OF PHYSICIANS AND ITS LICENTIATES.

[To the Editor of the Medical Times.]

Sir,—Your leading article on "the Licentiates of the College of Physicians," which appeared in the *Medical Times* of Saturday last, is but a very imperfect answer to my letter contained in the same journal.

You are, in the first place, in error in supposing that the degree of M.D. from an University is of so much importance to the candidate for license at the College of Physicians. See the regulations of the College, published in the Medical Directory for 1848.

The degree of M.D. is just taken for what it is worth, as any other certificate might be, and the candidate is judged whether worthy or unworthy of having the high station of a Physician conferred upon him, by his answers at the examinations; and this is quite right. We all know how medical degrees may be obtained. In Scotland, the Edinburgh degree of M.D. is conferred, by hundreds, on mere striplings of twenty-one! Now I will ask, is it possible, is it probable, that a mere boy, who may have left school for two or three years, can have possessed himself of sufficient knowledge, even theoretical, to take the highest nominal grade in medicine? My readers shall answer the question.

My verbal criticisms were called forth by your own distinctions drawn between Physicians and Doctors; and I think I have proved clearly, that Doctor does not mean Physician in any sense. Averse as I am to splitting words, nevertheless, it must not be overlooked that words have meanings, and where the human mind has adopted a symbol we are bound to trace that symbol to the idea which gave birth to it.

I should be glad to know on what authority you state, "an University only is legally authorised to grant *the title* of M.D." Universities may have the sole power of conferring the *degree* (*gradus*) of M.B. or M.D. But, on the other hand, if Her Majesty Queen Victoria, invests a College, or any other seat of learning, with the power of conferring all *titles* and privileges of a Physician upon those who undergo due examination, I maintain that such College can confer upon its members *the title*, not the University degree, *gradus*, which they are authorised to do by Royal Charter and Acts of Parliament.

Her Majesty may authorise the College of Surgeons to confer upon its members the title of Doctor of Surgery, which would then be as valid a title as any in the kingdom.

How do Universities hold their powers?

Your obedient servant,

April 15. Ιατρος.

[We do not think that our Correspondent has exactly seized our argument. It is no doubt competent to the College of Physicians to admit any one it pleases to the examination for the license. It can do no more; and the only "privileges" it can give are the right to practise as a Physician in London, or within seven miles. That the College considers the possession of an University M.D. indispensable, except in certain cases, is obvious from the regulations. Our Correspondent is correct in stating, that the Sovereign can grant to any Corporation or person, as indeed has been done in the case of some ecclesiastical dignitaries, the right of conferring the degree of M.B. or M.D.; but he is quite in error if he supposes, that such power has been yet given to the College of Physicians. The College has, in fact, never claimed such right; and, as we have previously affirmed, even the admitting to the license those who have not previously taken an University degree, is considered by many as an infringement of the spirit of the Charter. Universities hold their powers by Royal Charter; the same power could certainly give to the College of Surgeons the right of granting degrees in Surgery, but it has not yet done so, any more than it has granted to the College of Physicians the right of granting degrees in Medicine.—Ed. *Med. Times.*]

THE GORDIAN KNOT CUT.

[To the Editor of the Medical Times.]

Sir,—The ultimatum of the College of Surgeons, of the 5th February, 1850, published in your number for February 16, page 123, has proved, as you anticipated in your leading article of the same day, a true "Declaration of War." The scabbard has been thrown away, and war to the knife has been declared by the College of Surgeons against the National Institute. The *casus belli* is brought into a nutshell. The National Institute contend for the unrestricted control of the entire education of the General Practitioner in every branch of medical science, surgery included. The College of Surgeons claim the undoubted right and privilege of being the *sole public body in England entitled to regulate and test the education of surgeons.* Nothing can be plainer than this. He may read that runneth. The National Institute will not give way. The College of Surgeons are firm. What is to be done? "The *dead lock*" at which matters have arrived cannot last for ever. Some one must interpose, as in the parallel case of Sheridan's farce, and bring about peace "*in the Queen's name.*" There seems to me but one mode of solving this great problem in medical education, and I am going to tell it to you *quite in confidence.* It is the secret *in our little parlour*, which you must not blab for all the world.

There must be two portals through which the General Practitioner may march to the fulfilment of his high duties. The College of General Practitioners must have their way. They must be clothed with all the powers they ask. The law must allow it, and the court award it. They must possess the power of sending forth the *full-fledged* General Practitioner, commissioned to practise in medicine, surgery, and midwifery. But concurrently with this power and privilege, the existing College of Physicians and Surgeons must have the like power and privilege. They, by a diploma, issued by their joint authority, must also be enabled to testify the capabilities of young men to enter on the arduous duties of General Practitioner. It should be optional with the student through which portal to pass. I am not prepared to say which would, at the end of ten or twenty years, be the favourite road. Much would depend on the manner in which the respective colleges set themselves to their respective tasks; but of one thing I am quite sure, that the rivalry thus established would tend to the good of the Profession. To this complexion, I am firmly persuaded we must come at last. In this way, and in this way only, can the "Gordian Knot be Cut."

I am, Sir, your obedient servant,

Alexander Alter.

London, 15 April, 1850.

MR. JACKSON ON THE SPLEEN.

[We are requested to give a place in our columns to the following letter:—]

[To the Editor of the Lancet.]

Sir,—Amongst the Notices to Correspondents in the *Lancet* of the 16th ult., there is a paragraph, to which my attention has only recently been called, in which you have mentioned my name, and made some unfair and incorrect statements in connexion with it, and which, in justice to myself, I cannot allow to pass without reply. You there take upon yourself to extol one set of opinions, and to condemn another, and, as is perfectly evident to me, without understanding either. I deny that I have ever written on so absurd a subject, or on one deserving of so absurd a title as that which you tell your readers I have been doing for the last ten years, viz., "the Spleen, and *its* Vessels, Afferent and Efferent." It is true, I have written on the Three Afferent Vessels, with the view of throwing light upon one of them, the hepatic,—and of which vessel the spleen happens to be a part, its commencement, or roots; but your expression, which I have just quoted, is a misnomer and a misrepresentation, and sheer nonsense to boot, and only shows that you are perfectly ignorant of the subject on which you have ventured to express a decided opinion.

Dr. Ayres' letter, notwithstanding your eulogium, contains and advocates a doctrine which, beyond all doubt, is the *ne plus ultra* of physiological absurdity. He states, that one portion of the digested food passes from the alimentary tube, through the mesenteric veins, into the portal vein; and that another portion passes into the lacteals, and through the mesenteric glands and thoracic duct, into the left subclavian vein;—that starch, sugar, gum, and fat, take the former course, and albumen, fibrine, and caseine, the latter. Now this is, in effect, telling us, that the *bread* we eat goes one way, and the *cheese* another and totally different way! And the same, again, with regard to the *fat* and *lean* of meat! This cannot be sound physiology, for it is not even common sense; but yet it had the effect of exciting your editorial admiration,—and you could publish it to the world, and call the letter which contains it, "able, argumentative, and convincing"!

And now let us see what is the view which, according to your unbiassed judgment, is the opposite of all this,—the Satyr to your Hyperion! It is, that the hepatic afferent vessel, a vein of which the spleen is merely the roots, and whose branches are in the liver, and whose trunk extends across between the two organs and connects them,—receives by the gastro-intestinal or mesenteric veins, which terminate in its trunk, the drink and digested food as well as the blood from the alimentary tube, and effects their slow and gentle propulsion through the liver into

(a) For a mere registration-fee, in the case of all who are already qualified and engaged in practice.

the heart. But it appears that you, in common with most others, are wedded and faithful to the belief, that a considerable portion, if not the whole of the digestive solids—or that, at any rate, the whole of the albumen, fibrine, and caseine—is absorbed by the lacteals, and transmitted through the mesenteric glands and thoracic duct into the left subclavian vein. Now, the composition of the chyle is another fact which, in addition to those I have before pointed out, is completely opposed to this view, and, in my opinion, refutes it. In 1000 grains of chyle 940 are water, and only 60 solid constituents. Now, 60 in 1000 is 1 in 16 2-3rd. It follows, therefore, that for *an ounce* of solid constituents—albumen, fibrine, &c.—to get from the small intestines, which are in the abdomen, up into the left subclavian vein, which is at the very top of the thorax, 16 2-3rd ounces, or upwards of *one pound* of chyle, would have to be taken up by the lacteals, and pass through the mesenteric glands and thoracic duct. For a *single pound* of solid constituents—and we probably all take that in the course of a day—to enter the circulation by that course, 16 2-3rd pounds, or considerably more than *one stone* of chyle, would have to traverse it. How much chyle would have to pass *per diem* through the thoracic duct of a Samoyede, who, it is said, consumes 10 pounds of flesh daily, if that long and slender tube, as is very generally believed, be the "inlet for the fresh nutritive materials derived from the digestive process," I leave others to calculate. The doctrine that it is so is monstrous; and it is quite marvellous to me that any man of sense can tolerate, much more advocate it. The only adequate channels for the absorption and transmission of the fluidified or digested solids from the alimentary tube are the *blood-vessels;* and, though I may be singular in my opinion, I am not more thoroughly convinced that the food and drink pass from the mouth through the pharynx and œsophagus into the stomach and bowels, than I am that they then pass into the gastro-intestinal capillaries, and through the gastro-intestinal, or mesenteric veins, into the hepatic afferent vessel,—a vessel the office and action of which, if it were not for the dust raised and flung about by *soi-disant* physiologists, would be as evident to the minds of all reasonable men as are the office and action of the urinary bladder.

I have one more remark to make in reply to your gratuitous, unmerited, and uncalled-for attack; namely, that it is not to be expected that those who either *will* not, because of their prejudices, or *cannot*, because of their stupidity, see an error or absurdity, however glaring and preposterous it may be, will be amongst the first to recognise any new truth; and, as I have long been aware, it is but throwing pearls before swine submitting truth to their consideration.

I am, Sir, your obedient servant,

JOHN JACKSON.

17, Finsbury-place South, April 16, 1850.

NAVAL ASSISTANT-SURGEONS.

[To the Editor of the Medical Times.]

SIR,—I am well assured that by your ever urging forward the oppressed condition of the Naval Assistant-Surgeons before the free-judging public, you will favour me by receiving a few remarks upon the late defence of the Lords of Admiralty to Captain Boldero's independent motion upon the Assistant-Surgeons being admitted as ward-room officers. So fallacious, so puerile, so meaningless were the objections, that really the service-man must have smiled and smiled again; but, as many of your interested and talented readers, necessarily, from their position and daily avocations, must be ignorant of the routine of the Royal Navy, it is to that particular part of your admiring readers that I will simply unfold and strip these visionary objections, and leave for their calm, unbiassed judgment the pure and unadorned truth.

First.—Admiral Dundas stated that the ward-room of H.M.S. Queen was too small, containing already 22 officers, and, with 3 Assistant-Surgeons in addition, would make 40.

Answer.—H.M.S. Queen's ward-room contains only 17 officers, and, with 3 Assistant-Surgeons, would make but 20.

Second.—If the Assistant-Surgeons were removed to the ward-room, that part of the ship would have to be enlarged, which would be highly inconvenient to the comfort of the people.

Answer.—The people *live* on the lower deck, therefore, by removing the Assistant-Surgeon from the gun-room upon the same reasoning, that part of the ship could be reduced in favour of the accommodation of the people.

Third.—It was stated, the expenses of the ward-room mess are so great that the Assistant-Surgeon would incur many pecuniary difficulties.

Answer.—The Assistant-Surgeon's pay is far greater than the Purser's, Lieutenant of Marines, equal to the Chaplain's, and only minus 22*l.* of the Lieutenant, all ward-room officers.

The above being the points advanced, I will leave you and your readers to judge of their truthfulness; but still, not content with making these doubtful, these frail assertions, Captain Berkeley went still further, and coolly recorded, before a British House of Commons, that the Assistant-Surgeons' messing in the cockpit, and associating with these little Rugby and Eton boys, who had *finished* their education at the early age of thirteen, was a great advantage, as he considered they were not a jot inferior to the Naval Assistant-Surgeon. With this sad hallucination, let the Medical reader draw a veil of shame, softened by the whisper of forgiveness.

JUSTITIA.

MEDICAL REFORM.—LETTER TO MR. MARTIN.

[To the Editor of the Medical Times.]

SIR,—At this important crisis every General Practitioner should state his opinion, as opportunity offers, respecting the remedies proposed for the present chaotic state of the Medical Profession.

Being unable to attend the meeting of the South Eastern Branch of the Provincial Medical Association, held yesterday at Brighton, I addressed the following letter to my respected friend, Mr. Martin, of Reigate, the indefatigable and able Secretary of that Branch. If you think the sentiments contained in my letter are likely to be at all useful in assisting any of my fellow General Practitioners to come to right conclusions at the present moment, you will much oblige me by giving the Letter insertion in the *Medical Times*.

I have confined myself to the points purposed to be discussed by the Provincial Association, but the *one great fact to be kept in view*, is the necessity of obtaining a College, (I care not where,—whether in Pall Mall, Lincoln's Inn, or Hanover-square,) in which they shall have the thorough management of their own affairs upon the strictly representative principle, and the control of the education of their own Body.

I am, Sir, your obedient servant,

GEORGE WEBSTER.

Dulwich, April 17, 1850.

Dulwich, 15th April, 1850.

MY DEAR SIR,—As I find I shall not be able to obey your call to attend the meeting of our branch of the Provincial Medical Association, at Brighton, on Tuesday, which I greatly regret, I cannot forbear addressing you and my fellow-members on the momentous question which will occupy your attention.

The Central Council of the Association held a meeting at Worcester on the 18th ult., at which they proposed three questions for the consideration of the district branches; and they remind us of the three "principles" which have been "adopted by the Association as those on which any comprehensive and satisfactory measure (of medical reform) can be based, viz.:—

"1st. Uniform and sufficient qualification in every branch of medical science.

"2nd. Equal rights for all so qualified to practise throughout the whole extent of Her Majesty's dominions.

"3rd. The adoption of the representative principle in the formation of the Council or governing bodies."

Now I have never been able quite to understand how every person entering our Profession can have a uniform qualification in every branch of medical science. The thing appears to me to be absolutely impossible; but I suppose it is intended that all shall be similarly educated and tested; and that without a certain *minimum* amount of medical knowledge in all branches, theoretical and practical, no one shall be allowed to enter the Profession. If all are then to be tried by the same standard, the title ought of course to be the same for all; and, 2ndly, and very properly, all so equally qualified (or rather equally examined) ought to possess "equal rights to practise in all parts of her Majesty's dominions."

Thus the whole of the members of the Medical Profession would form but *one body*,—in fact, a faculty of medicine, which, 3rdly, would no doubt be governed by its council on the representative principle; and I cannot see how it could be otherwise governed.

But the three questions proposed by the Council are altogether at variance with these principles; for, instead of "a *uniform* and sufficient qualification in every branch of medical science, the three questions refer to three sorts of qualifications, by three distinct bodies or Boards, to three distinct classes of Medical Practitioners. This appears to me to be a falling off from the three principles with a vengeance! But, dismissing the unity of the Profession, which I am sorry to do so very unceremoniously, let us consider the three questions as proposed:—

"1. Can these principles be carried out by the alteration of the Charter of the College of Physicians, in the manner proposed by them, and generally approved of by the Profession, and by the alteration of the Charter of the College of Surgeons, in the manner recently proposed by that body?"

As to the College of Physicians, I very much doubt whether the proposed alteration in their Charter has been so "generally approved of by the Profession." There are about 380 M.D.'s who are acting in the provinces as Physicians, without license or authority from the College of Physicians, and there are nearly 100 in London who practise in defiance of the College. I think it very possible that these gentlemen would be glad, by a new Charter and the payment of 15*l.* 15*s.* each to the College, to be placed on a more legal and respectable footing than some of them are at present; but I suppose these 480 gentlemen will not pretend that they are "the Profession" *par excellence*, though I am willing to give many of them all the honour due to them as men of science and skill in their department of the Profession. The College, on the other hand, would be too glad to extend their power and authority over the whole of England, instead of being confined to the Metropolis, as at present; and they would doubtless be delighted to receive in entrance-fees such a convenient, and, to them, unwonted sum, as 7,500*l.* But what all this bartering and huckstering could have to do with the principles aforesaid, or with the advancement of Medical science, I am quite at a loss to know. Another and very pertinent question has been asked as to this College, viz., whether, having served its day and generation, it is now *required* for the protection of the public against "ignorant and unlearned pretenders?" or, rather, whether it has for several generations past pursued any steps to protect the public against such pretenders? It should be remembered, also, that this College stands on a very different footing from the College of Surgeons and Society of Apothecaries, whose candidates for a license have not been previously examined, while the candidates presenting themselves at the College of Physicians are Graduates in Medicine in the various British Universities, and as these bodies now all perform their duties in an efficient manner, what necessity is there for any further examination? This, at least, ought to be abolished.

The second part of the first question, as to "the alteration of the Charter of the College of Surgeons in the manner recently proposed by that body," may be quickly dismissed. The alterations proposed are mere moonshine, and such as ought to satisfy no section, however small, of the body Medical, not even the old Fellows whom it would at least admit into its upper ranks.

This College is bent upon being considered a College of *Pure Surgery*; which, in plain sober language is pure nonsense! Who, theoretically, is a pure Surgeon? One who can perform operations only; who knows nothing of Medical Science, strictly so called, nor of the qualities or effects of remedies; and *who, by his own confession*, is manifestly unable to prescribe for the unfortunate patients on whom he is called to operate. I do not say that this is general in these days, but unfortunately it was so very recently, as I and many others can testify who have been obliged to correct the wretchedly unchemical prescriptions written by men who thanked God that they knew nothing of Medicine!—in other words, thanked God for their own ignorance and culpability!!

I find by the Medical Directory that in London there are about 110 Consulting Surgeons, and about 50 in the large towns in England, and for these 160 Surgeons, more or less pure, distinctions and divisions have been created, and are to be perpetuated, which have hitherto been altogether unknown: and for the glorification and aggrandisement of this small class of Hospital Surgeons, the honour, respectability, and interests of the 10,000 members are to be sacrificed! Verily this is a new way of producing unity, and uniform qualification in the Profession!

Question 2nd. "Can the College of Surgeons be so modified as to become the licensing board of the General Practitioners, either alone, or in conjunction with some other body?" I say deliberately, se-

riously, and emphatically, No! The College of Surgeons have lately taken a new position by the creation of fellows. For the first time there are grades, which implies *degradation and inferiority* to the 10,000 members. This, with the whole recent conduct of the Council at the conferences, shows that the College of Surgeons cannot be entrusted to examine and license the General Practitioners of this country, whether alone or in conjunction with any other body. Let not the General Practitioners trust the body which has repudiated, insulted, and trampled upon them. They may be geese, but I trust they will never be silly enough to commit their interests to foxes.

Question 3rd. If not, is it desirable that a separate Incorporation of the General Practitioners should be obtained?—Undoubtedly it is; and nothing else remains but for the General Practitioners to achieve their own independence in a truly Representative College of Medicine and Surgery, with the entire management of their own affairs, and the control of the education and licensing of their own body, subject, of course, to any general regulations of a Council of Education for the whole Profession.

This, I consider, is a question which, at all meetings for its determination, ought to be decided entirely by the votes of the General Practitioners, because it does not concern the consulting physician, nor the consulting surgeon.

The Physicians have their own College, and if they wish it, by all means let them retain it, and reform it, if they think fit. The Consulting Surgeons have their own College and their own constituency,—why should they be disturbed? Let them remain in all that purity for which they have sacrificed so much. But the Hunterian Museum and Library belong to the whole body of the members, and must be opened to the Profession at large, without let or hindrance. The General Practitioners, acknowledged by none, repudiated and insulted by all, ought surely to have their College, where they can meet and discuss their own affairs, without fear of arrest if they open their mouths, as at the College of Surgeons. Would such a College carry out the three principles of the Provincial Association, and tend to the unity of the Profession? I say, Yes. The power of the three departments would then be balanced, by each possessing corporate rights and privileges. They would then meet on an equality, and then a Joint Board of Examination might be formed, to apply uniform tests of qualification for all who should enter the Profession. This might be the General License *to practise* Medicine and Surgery throughout Her Majesty's Dominions;" and this Licentiate of Medicine and Surgery might join either of the Colleges of Physicians, Surgeons, or General Practitioners, as inclination or circumstances might lead him. There would then be a conformity in education and a relative unity in the Profession; and the great object which all have in view would be certainly attained, viz., a supply to the public and the public services of Medical Practitioners, highly educated and qualified to practise all the branches of the Profession.

The importance of the subject has carried me much further than I expected or intended; but in conclusion, I trust that the example set by the great meeting in London on Thursday last will be followed at Brighton, instead of the unfortunate and suicidal proceedings which I regret to have observed at some of the Branch meetings, and by which the great body of Medical Practitioners of this country would be bound hand and foot, and delivered over to the tender mercies of the College of Surgeons.

Believe me, ever yours very faithfully,

GEO. WEBSTER.

To Thos. Martin, Esq., &c., &c. &c.

PRESERVATION OF LYMPH.

[To the Editor of the Medical Times.]

SIR,—Having seen, in the *Medical Times*, a method recommended for preserving vaccine lymph, I am induced to mention to you the following plan, which I found in use at the National Vaccine Institution, when I was formerly appointed Inspector of Vaccinators.

Fine capillary glass tubes, about three or four inches long, terminating in a closed bulb, were procured, and when the mature vaccine vesicle had discharged—by puncture—a sufficient quantity of lymph, the air was expelled from the tube by a gentle heat applied to the bulb, and the open end inserted directly in the lymph, which, on the cooling of the bulb, was drawn up the tube, which was then hermetically sealed by the flame of a candle. Nicety was required not to heat the bulb too much, or the lymph would be carried too far, but, when properly managed, a small column of lymph would be retained near the sealed end. When subsequently wanted, by breaking off the sealed end, a gentle heat would drive the lymph upon glass, and it could be used as effectively as recent lymph.

In this manner lymph was sent from the Institution to the Colonies and elsewhere abroad. I should recommend it as the best plan for preserving it. The dried vesicle, or scab, which falls off the arm at the termination, had also been frequently used—made into a paste—by Mr. Gillham, my successor, as he told me, with success, when in want of more recent sources.

I am, Sir, your obedient servant,

JOHN C. HUNTER.

30, Wilton-place, April 17, 1850.

NAVAL ASSISTANT-SURGEONS.—The following Petition from the President, Vice-Presidents, and Council of the Royal College of Surgeons of England, has just been presented to both Houses of Parliament, showing,—"That the Court of Examiners of the said College are required to examine into the qualifications of the Assistant-Surgeons of Her Majesty's Navy, on their promotion, and have found many who have neither improved nor effectually maintained their knowledge of the art and science of Surgery. That the President and Council deem it their duty to represent further, to your Right Honourable House, that the cause invariably assigned for this deficiency is, the want of such accommodation in the vessels of the Navy as is compatible with the requirements of study, and they are induced to believe, from the inquiries which they have made, that the Assistant-Surgeons of the Navy are placed under circumstances which are unsuited to the position and pursuits of members of a liberal profession. That the President and Council, under the impression that the Regulations at present existing tend to diminish injuriously the efficiency of the Surgical Service, and to deter all Surgeons from entering Her Majesty's Navy, humbly pray your Right Honourable House to consider the grievances of which the Assistant-Surgeons of the Royal Navy complain. And your Petitioners will ever pray.

UNIVERSITY AND KING'S COLLEGE, ABERDEEN.—Names of the gentlemen who, after examination on the various branches of medical science, obtained the degree of M.D., on the 12th April, 1850:—Henry Fowler Smith, Hampshire; Henry Scholfield Johnson, Lancashire; William Reynolds Hayne, Essex; Frederick Giles Broxholm, Middlesex; Patrick Brown, Galloway; William Thomas Domville, Greenwich; Robert Norton, Middlesex; John Chas. Atkinson, Middlesex; William Jones, Gloucestershire; Robert Little Hooper, Cornwall; William Woodham Webb, Middlesex; Samuel Alderson Plumbe, Middlesex; William Browne, Somersetshire; Thomas Nelson, Lanarkshire; William Alex. Anderson, Middlesex; Henry Appleton, Middlesex; William Kershaw, Lanarkshire; Thos. Mandeville Nash, County Leitrim, Ireland; John Hill Gibbs, Wiltshire; James Edward Pollock, County Down, Ireland; Thomas Robinett, Exham, County Cork, Ireland; Thomas Carstairs, Fifeshire; John Challice, Sussex.

CITY COURT OF SEWERS.—At the meeting on the 16th instant, Alderman Moon proposed, and Mr. Deputy Peacock seconded, the proposition, that Mr. Simon be instructed to put himself in communication with the Medical Officers of the City Unions, so as to obtain the most accurate returns procurable of all sickness occurring among the poorer classes, and that a sum of 500*l.* per annum be paid to those officers for the service. The object was, to supply Mr. Simon with such information as would enable him to meet any future emergency, and to establish a system of permanent sanitary efficacy throughout the City. Mr. Whiteside moved an amendment, that the sum to be paid be 245*l.* Alderman Lawrence, in opposing the proposition, said, that nothing was so completely calculated to bring back the cholera and other fatal diseases, as the appointment of a number of gentlemen of the Profession to look after the health of the people. Influenced by such reasoning (!), the City Dogberries negatived the proposal by a majority of ten.

MIDDLESEX HOSPITAL.—Dr. S. J. Goodfellow, formerly of the Fever Hospital, has just been appointed Lecturer on Medical Jurisprudence at the Middlesex Hospital School of Medicine, in the vacancy occasioned by the resignation of Dr. G. O. Latham.

HEALTH OF LONDON DURING THE WEEK ENDING APRIL 13.

The week ending last Saturday shows a considerable decrease in the mortality. The total deaths, registered in the Metropolitan districts, which, in the previous week, rose to 1124, were last week only 893, whereas the average derived from deaths in ten corresponding weeks of 1848-9, and raised in proportion to increased population, is 1001, and in the last three corresponding weeks, namely those of 1847-9, the deaths rose to about 1050 and upwards. In last week, as compared with that immediately preceding, the deaths classed as having been caused by zymotic or epidemic diseases, are almost exactly of the same amount; in this return there are 157, of which 7 were from small-pox, 15 from measles, 18 from scarlatina, 35 from hooping-cough, 4 from influenza, all of which diseases are at present less fatal than usual; there are also 37 from typhus, which is about the average; and 13 from diarrhœa, 6 from remittent fever, 5 from rheumatic fever (besides 3 from rheumatism), and 8 from erysipelas, from which diseases the mortality is rather above the average. But diseases of the respiratory organs still exhibit a small increase on the average, though compared with the mortality of this class in the previous week they show a reduction. Bronchitis, pneumonia, asthma, and other complaints affecting the organs of respiration (with the exception of hooping cough and consumption) number 174, the average being 164; their progress during the last six weeks may be traced in the following numbers: 171, 182, 231, 252, 253, and 174, these fluctuations being nearly coincident with rise and fall of temperature. Phthisis (or consumption) was fatal to 108 persons last week, an unusually small number; the year 1843 affords the only example of a corresponding week in which the mortality from this disease was so low; the average is about 150. On the 7th of April, in the Marylebone workhouse, a widow died, whose age is reported to have been 103 years; she sank by "natural decay." On the 28th of March, in Ferry-street, Poplar, the daughter of a labourer, aged 3 years, died of privation, or, according to the return made by the coroner's jury, from "natural death, accelerated by want."

The deaths in the several hospitals of London occurred as follow:—

GENERAL.		Sussex & Brandenburgh-house (Fulham)	0
St. George	4	Northumberland-house	0
Westminster	4	Whitmore House	0
Grey Coat Hospital	0	Pembroke House	0
Charing-cross	0	St. Luke	0
Middlesex	3	Miles'	0
University College	0	Warburton's	0
Royal Free Hospital	0	Lunatic Asylum, Bow	2
King's College	3	Bethlem	0
St. Luke, City-road	0	Lunatic Asylum, Brixton	1
St. Bartholomew	7	Retreat, Clapham	0
London	6	York House, Battersea	0
Guy's	4	New County, Wandsworth	3
St. Thomas	2	Peckham House	1
Bethlem, London-road	2	Camberwell House	1
FOR CONVICTS.		LYING-IN.	
Hospital Ship, Unité	0	Queen Charlotte's	0
Penitentiary Hospital, Millbank	0	British	0
MILITARY AND NAVAL.		City of London	1
Royal Hospital, Chelsea (South)	0	Hospital, York road, Waterloo 2nd part	0
Royal Hospital, Greenwich (East)	5	FOR PARTICULAR CLASSES.	
Royal Military Asylum	0	Female Servant Invalid Asy., Stoke Newington	0
Coldstream Guards Hos.	0	German Hospital	1
Grenadier Guards' Hospital	1	French Hospital	0
Scots Fusilier Guards	0	Portuguese Jews' Hospital	0
Royal Ordnance	0	German Jews' Hospital	0
Dreadnought Ship	2	FOR SPECIAL DISEASES.	
LUNATIC.		Small Pox	0
Kensington House	0	Fever Hospital	1
Munster-house (Fulham)	0	Lock	0
Normand-house (Fulham)	0	Consumption, Brompton	4
Otto-house (Fulham)	0	Opthalmic, Charing Cross	0
Blacklands-house	0		

TOTAL, 58.

BIRTHS AND DEATHS.

	Births.	Deaths.	Births over Deaths.
Males	745	459	286
Females	728	434	294
Total	1473	893	580

MORTALITY TABLE.

Deaths in the Week ending Saturday, April 13, 1850.

(Metropolis.)

Causes of Death.	Total.	Average of Ten Weeks.
All Causes	893	917
Specified Causes	891	913
Zymotic (or Epidemic, Endemic, and Contagious) Diseases	157	173
Sporadic Diseases:		
Dropsy, Cancer and other Diseases of uncertain or variable seat	38	51
Tubercular Diseases	163	192
Diseases of the Brain, Spinal Marrow, Nerves, and Senses	118	117
Diseases of the Heart and Blood-vessels	37	29
Diseases of the Lungs, and of the other Organs of Respiration	174	149
Diseases of the Stomach, Liver, and other Organs of Digestion	61	58
Diseases of the Kidneys, &c.	6	7
Childbirth, Diseases of the Uterus, &c.	7	8
Rheumatism, Diseases of the Bones, Joints &c.	6	7
Diseases of the Skin, Cellular Tissue, &c.	2	1
Malformations	2	2
Premature Birth and Debility	21	17
Atrophy	23	13
Age	48	53
Sudden	4	11
Violence, Privation, Cold, and Intemperance	24	21
Causes not Specified	2	4

The following is the number of Deaths occurring from some of the more important special causes:—

Apoplexy	28	Heart	33	Phthisis 108	
Bronchitis ...	68	Hooping-cough	35	Pneumonia ...	72
Cholera.....	...	Hydrocephalus	34	Scarlatina	18
Childbirth	2	Influenza	4	Small-pox	7
Convulsions...	31	Liver	10	Stomach	2
Diarrhœa	13	Lungs	11	Teething	12
Dropsy	14	Measles	15	Typhus	37
Erysipelas ...	8	Paralysis	24	Uterus	3

METEOROLOGY OF THE WEEK.

		Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Means
Electricity.*		Nothing was shown at any examination.	Positive, and tension weak at 9 p.m.	Nothing was shown throughout the day.	Positive, and tension strong at 3 and 9 p.m.	Positive, and tension strong at 9 p.m.	P. and at times N. between noon and 3 p.m.: volleys of sparks and galvanic currents were frequent. P., and tension moderate, at other examinations.	Negative, and very active at 9 p.m.	
Rain in Inches.		0·00	0·00	0·04	0·00	0·10	0·25	0·19	sum 0·53
Amount of Horizontal Movement of the Air.	Miles.	...	150	195	93	65	30	15	sum 540
General Direction of Wind.	P.M.	S.	S.	S.W.	S. & S.E.	Calm.	Calm.	Calm.	
	A.M.	S.W.	Calm.	S.S.W.	S.W.	E.	Calm.	Calm.	
Difference between the Mean Temperature of the day and the same day on an average of 7 years.		9·5 +	8·5 +	2·1 +	4·9 +	4·8 +	4·0 +	1·7 +	5·1 +
Ditto. Dew Point.		44·0	51·0	42·0	39·3	46·6	46·4	45·7	45·0
Mean of Thermometer. Dry.		54·4	53·2	46·6	49·2	49·0	48·2	46·2	49·5
Mean of Barometer.		29·563	29·371	29·296	29·313	29·275	29·565	29 699	29·425

* In this Column, A. stands for Active; N. for Negative; and P. for Positive.

Day.

MEDICAL NEWS.

Apothecaries' Hall.—Names of gentlemen who passed their examination in the science and practice of Medicine, and received certificates to practise, on Thursday, the 11th April, 1850:—Henry Sacheverel Edward Schroeder, Guernsey; Thomas Leonard Barber Barwis, Penryn, Cornwall; John West Walker, Spilsby; James Vandersloots M'Cormick, Acton-street, Gray's-inn-road; Alfred Peskett, Petersfield, Hants; Frederick Martin, Clare, Suffolk; James Breach, Bradfield; Henry May Davis, Hastings; James Wilson, Lancaster; Francis Henry Plumptre, Queen-square; Robert Thomas Buckle, Bedall, Yorkshire; Reuben Whitchurch, Melton-Mowbray; Alfred Hill, Walsall.

Royal College of Surgeons.—The following gentlemen having undergone the necessary examinations for the Diploma, were admitted Members of the College at the meeting of the Court of Examiners, on the 12th instant:—Messrs. John Little, Ballina, County Mayo, Ireland; Frederick Williams Calwallader Beavan, Blenchland, Northumberland; Halib Aga Risk Allah Effendi, Syria; Thomas Wilson Caird, Exeter; Charles Harriott Raper, Exeter; Henry Penfold, Annington, Steyning, Sussex; Henry Jeremiah Mayhew, Overhall, Colne Engdine, Essex; James Patient, Corton, Wiltshire; Daniel Saunders, Llandovery, Carmarthenshire; Griffith Hooper Griffith, Cheltenham; and John Bidlake Mountford, Exeter.

University College.—Many of our readers are aware of the disturbances which took place about five weeks ago at University College, in consequence of the "rustication" of two students by the Council, and that the College was restored to its usual tranquillity upon these gentlemen being reinstated in their former position, at the recommendation of the Professors. A renewal of these disturbances having taken place on Saturday, April 13, it is necessary that the true facts of the case should be laid before the public. Three students had been summoned to appear before the Council on that day, "to answer a charge of misconduct to Mr. Champion, the Sub-Librarian of the General Library, on the 1st of April." Before the hour of investigation, a large number of police were stationed near the College gates and in the adjoining streets; this attracted to the College a few of the students remaining in town during the vacation, amounting in number, as was afterwards ascertained, to twenty-six. After an inquiry, which lasted two hours, the Council decided that the charge was not proved, otherwise they expressed their determination to have resorted to the utmost extent of punishment in their power. The three accused were heartily cheered upon rejoining their fellow-students. Some of the Professors who happened to come up were likewise cheered. The appearance of the Council, on the other hand, excited an irrepressible burst of laughter; some of them turned back, and one, going up to a student, demanded his name. This was refused, whereupon, seizing the student by the arm, he cried, "Police! take this man in charge." The students raised a shout of "No, no," which was replied to on the part of the Council by loud cries of "Yes, yes." Immediately several strange men rushed from concealment and laid hands on the student. These men were afterwards discovered to be police in disguise. A general *mêlée* ensued, which resulted in the students rescuing their companion. Two other students, who were also seized, were similarly rescued. After this, at the earnest intreaty of the Professors, the students went away quietly, and, after the lapse of a few minutes, the police, who had hitherto remained quiet in the street, marched in and took up their position in the cloisters of the College, where they remained for a short time, and then marched out again. A meeting of the Council was appointed for yesterday, but as yet no further disturbances had taken place.—*Times.*

The Fellowship.—The following are copies of the questions proposed to the gentlemen who presented themselves, last week, as candidates for the Fellowship of the Royal College of Surgeons. A list of the successful candidates is published elsewhere. The Senior Candidates were required to answer the following questions in Pathology and Surgery, viz:—

1. Describe the character, progress, and treatment of Traumatic Gangrene.

2. Describe the nature of Hæmatocele, and its treatment.

3. Describe the peculiarities of a case of Strangulated Femoral Hernia, in relation to the diagnosis, the mode of reduction, the proposal of the operation, the several steps of the operation, the division of the stricture, and the question of opening the sac.

4. What are the diagnostic symptoms, the nature and extent of the injury, the probable result, and the treatment of Fracture of the Vertebral Column in its dorsal portion?

5. Explain the origin, progress, and differences in Hæmorrhoidal Tumours, and describe their treatment.

6. What are the immediate, the consecutive, and the remote ill-effects of Concussion of the Brain, when severe? An what is the treatment of such an injury in its different stages?

The following questions on the same subject were given to the junior candidates, viz:—

1. Wounds of Arteries;—their varieties; their relation to hæmorrhage; their mode of reparation; and the operation of ligatures.

2. The Pathology of the Scrofulous Tubercle.

3. The Pathology of Secondary Abscess.

4. The Pathology of Ulceration, and the process described in hard and soft parts.

5. The signs, the consequences, and the treatment of Foreign Bodies in the air-tubes.

6. Amaurosis;—its signs and symptoms; its causes and pathological conditions; and the principles of its treatment.

N.B. Answers to any four of these questions were accepted as sufficient, provided always that they were *accurate* and *adequate*.

The Government Scheme for Interments.—The Bill introduced by Government provides that, in future, the entire system of burials is to be regulated by Act of Parliament. Public burial-grounds are to be formed in suitable situations, and interment in them is, after a certain period, to be compulsory; no funeral to take place elsewhere, except by license. The management of the cemeteries, and all the arrangements connected with funerals, from the first removal of the corpse to its final interment, are to be intrusted to the officers of the General Board of Health, assisted by an adequate staff of subordinates. Reception-houses are to be constructed at suitable spots, in which the bodies may be deposited preparatory to interment. No dwelling-houses to be built within a given distance of the cemeteries, which are to be part consecrated and part not,—with a church for the one and a chapel for the other.

Jacksonian Prizes.—This prize, founded by the late Samuel Jackson, Esq., a Member of the Council, has just been adjudged by the President and Council of the Royal College of Surgeons to Mr. Peter Hinoks Bird, of Birmingham, a Member of the College, admitted May 19, 1848, for his Dissertation on Erysipelas, its Nature and Treatment. The other prize has been awarded to Mr. Henry Lee, of Dover Street, Piccadilly, a Fellow of the College, by examination, for his Dissertation on the Causes, Consequences, and Treatment of Purulent Deposits. The prize is of twenty guineas, accompanied with an honorary certificate.

Royal Veterinary College.—A large meeting of the students of the above Institution took place at the Freemasons' Tavern, on Thursday evening last, for the purpose of presenting to Professor Simonds a handsome silver epergne, on which the usual complimentary donative inscription was engraved. The other Professors were present by invitation of the class, and during the evening the most friendly sentiments towards each other were exchanged, and the greatest unanimity existed. It is pleasing to be able from time to time to record these expressions of gratitude on the part of students, which redound equally to the honour of both the teacher and the taught.

TO CORRESPONDENTS.

"Mr. Henry Greenaway's" description of an apparatus for reducing fractures of the lower extremity is in print, and will appear next week.

We shall take an early opportunity of reviewing Dr. Madden's late work on Pulmonary Consumption, with some others on the same subject.

"M.D., Extra Urbem," reached us too late for this week's impression.

"H. B. M."—It is our most anxious endeavour to carry out the views advocated by our Correspondent. We entirely agree with him *in all he says*. Want of space often compels us to omit what we would gladly insert; and even as it is, we assert, and that fearless of contradiction, that no existing British Medical Journal contains the same mass of *instructive* matter, as does the "Medical Times."

Our friend "Peter" is informed, that we cannot insert in our pages that which has appeared in contemporary journals.

"Dr. Wilks, of Camberwell."—Next week.

Our Scotch Correspondence arrived too late for insertion this week.

The second part of Dr. Bushnan's paper on Mesmerism will appear next week.

"Inquirer."—The notices of the Parisian Hospitals will be continued as soon as possible. Our Correspondent's suggestion, that they should be followed by sketches of the Metropolitan Hospitals, shall be duly considered.

"Anti-Humbug" may rest assured, that homœopathy and its practitioners will be duly examined in our columns.

ORIGINAL LECTURES.

THE LUMLEIAN LECTURES FOR 1850.

DELIVERED AT THE ROYAL COLLEGE OF PHYSICIANS.

By R. B. TODD, M.D., F.R.S.

ON THE PATHOLOGY AND TREATMENT OF DELIRIUM AND COMA.

LECTURE I.

The importance of fixed principles of pathology and practice in Delirium and Coma.—Definition of Delirium—of Coma.—Existing views of their pathology unsettled.—Clinical History of the different forms of Delirium.—Epileptic Delirium.—Cases.—Effects upon the Brain.—Renal Epileptic Delirium.—Choreic Delirium.—Case.—Hysterical Delirium.—Effects upon the Brain.—Cases.—Delirium in men from over work.—Puerperal Delirium.—Effects upon the Brain.—Anæmic Delirium.—Traumatic Delirium.—Delirium of Typhus—of Erysipelas—Rheumatic Delirium.—Its complication with Cardiac Inflammation.

Among the most formidable indications of disturbance of the great central organ of the nervous system, the brain, are those states which are known as coma and delirium.

These states are so destructive of the consciousness of the patient, or pervert to so great a degree his intellectual powers, that we cannot wonder that the utmost alarm should be excited in the minds of all, whether friends or Medical men, who may be in attendance upon him. And, perhaps, there are few occasions in which the physician stands more in need of all that self-possession which sound knowledge is most likely to impart, than when during his attendance upon a patient, either a comatose or a delirious state should be suddenly added to his previous symptoms.

It is then that he is forced to appeal to his former experience to guide him in his prognosis, and to direct his practice; then, too, he is compelled to examine the grounds of his principles—to assure himself as to their soundness, and as to the safety of following the course which they indicate.

The physician of a true and right spirit is no respecter of persons; with him the duty of using every exertion to save life is the same, whether the patient be high or low, rich or poor; the responsibility of saving life is the same, whatever be the condition of the individual; but, in his attendance upon some patients, his feelings would be more engaged than with others; and the more they are involved, the less free would be his judgment, and the more need would he have to depend upon sound and fixed principles.

On these grounds, all who are engaged in the deeply-responsible duties which belong to the practice of medicine, are interested in inquiring whether, indeed, any settled views are pretty generally entertained by the best informed Practitioners, with reference to the pathology of coma and delirium, and regarding the appropriate treatment of these conditions.

But, independently of all such considerations as these, it is clearly of vast importance that we should have exact views as regards the intrinsic nature of these conditions—coma and delirium.

Coma, in its most profound state, may be defined as a complete suspension of that mental influence of the mind and of the organ of consciousness, in which, speaking physically and physiologically, our consciousness exists; a suspension which no doubt begins with the physical organ, and therefore involves the powers of thought and of perception; so that the comatose patient neither wills, nor feels, nor thinks; and he awakes from this state as from a deep sleep; he knows not where he has been, and he feels as if, during a certain interval, he had ceased to exist.

The state of delirium, in its highest degree, is a complete disturbance of the intellectual actions; the thoughts are not inactive, but rather far more active than in health; they are uncontrolled, and wander from one subject to another with extraordinary rapidity, or, taking up some single subject, they twist and turn it in every way and shape with endless and innumerable repetitions. The thinking faculty seems to have escaped from all control and restraint, and thought after thought is engendered without any power of the patient to direct or regulate them. Sometimes they succeed each other with such velocity, that all power of perception is destroyed, and the mind, wholly engrossed with this incessant development of thoughts, is unable to perceive impressions made upon the senses; the patient goes on unceasingly raving, apparently unconscious of what is going on around him; or it may be that his senses have become more acute, and that every word dropped from a bystander, or every object presented to his vision, will become the nucleus of a new train of thought; and, moreover, such may be the exaltation of his sensual perception, that subjective phenomena will arise in connexion with each sense, and the patient fancies he hears voices or other sounds; ocular spectra in various forms and shapes appear before his eyes, and excite to further rhapsodies of thought.

If, then, these states of coma and delirium involve so complete a departure from the normal condition of the consciousness of the intellect, and if, as experience teaches us, they are apt, one or other, to accompany diseases of organs other than those which form part of the nervous system, surely nothing can be of higher practical moment than that our views of the pathology of these states, of the precise nature of the derangement of the physiological action of the body, which is capable of producing them in their various degrees,—I say, nothing can be more important practically than that our views upon these points should be definite and settled. Such derangements as these, affecting as they do, in the most serious manner, both consciousness and the power of thought, must lie at the very foundation of our knowledge of the derangements or diseases of the nervous system. Can it be expected that we shall be able to form any correct idea of the effects which inflammation or other disease of the brain is capable of producing, if we know nothing of the intrinsic nature of those conditions which give rise to coma or to delirium?

It may be, however, that some will say, surely there is no need for occupying time with any new inquiry into the pathology of these conditions, inasmuch as the views of Practitioners upon these points are pretty well agreed. To such a remark I must reply, that it is a source of much astonishment to me how little the views of Practitioners appear to be agreed upon this subject, and to what a trifling extent these two conditions, coma and delirium, as special affections of the nervous system, appear to have been investigated by pathologists.

I have carefully looked through the literature of these subjects, and I have failed to discover anything like a full discussion of the pathology of these important affections, founded upon careful *clinical* investigations; and, so far as the subject has been discussed, writers and practitioners seem to rest contented with the opinion, that all comatose affections and delirious states are referrible to various degrees of congestion of blood in the blood-vessels of the brain, or of fluid poured out in the sub-arachnoid cavity or in the cerebral ventricles.

I am, therefore, not without hope, that an inquiry into the nature and treatment of these affections may be considered an appropriate subject for these Lectures, nor an unsuitable sequel to the Lectures I had the honour to deliver last year upon the pathology and treatment of convulsive diseases.

I propose to consider these subjects on the following plan:—

First: I shall inquire into the clinical history of delirium and of coma, whether they arise from disease, or from the introduction of some deleterious agent into the system; and in connexion with this, I shall collect what facts I can respecting the results of *post-mortem* examinations in fatal cases.

Secondly. From the facts thus collected, viewed in connexion with our present knowledge of the general laws of nutrition, and of the physiology of the nervous system, I will endeavour to deduce a view of the pathology of these affections.

And, lastly, I shall describe the treatment suited to the various forms of them, which is most accordant with reason and experience.

Delirium exhibits great variety as to the extent to which the perturbation of the intellectual powers has taken place; in some instances, amounting to a simple wandering of the thoughts, and an inability to fix the attention and to maintain a continuous train of thought; in others, consisting, as it were, in an extraordinary exaltation of the thinking faculty, with an extreme excitement of feeling and temper, leading, in many instances, to violent maniacal paroxysms, under the influence of which the patient exhibits a degree of muscular power, which is very apt to deceive the practitioner as to the amount of intrinsic strength which he possesses. So great is the difference of degree between the highest and the lowest forms of delirium; between the slight wandering—or, as nurses and patients are apt to call it, *lightheadedness*—and that delirium *ferox* or acute mania in which the patient threatens with destruction himself and all around him, that it may fairly be matter of question whether these two states ought to be placed in the same category as regards their pathology; whether, indeed, they may be considered as only different degrees of the same disease.

Delirium occurs under such a remarkable variety of circumstances, in such various conditions of the system, that I find it impossible to give anything like a connected view of the subject without describing the several forms *seriatim* as we meet with them in practice, arranging them in the following order:—

1. *The Epileptic Delirium.*—I do not think that this form of delirium is sufficiently appreciated by practical men. It seems to me to be of frequent occurrence, and that, in some of those instances in which, under some sudden impulse, persons are led to commit some dreadful deed, which is opposed to the whole tenor of their previous lives, it is the sudden access of epileptic delirium which has thus disturbed the balance of their moral nature.

I shall describe the phenomena of this delirium from some cases which I have witnessed. A man, hitherto healthy, fails somewhat in health, becomes dull and melancholy, takes a gloomy view of things, but still his ill health is not sufficient to prevent him from following his usual avocation, nor is it noticed by any, save perhaps those who are constantly with him. There may or may not be some cause for this; some excess, or some mental trouble or anxiety; some altered position of his affairs.

Presently, either at night or on first waking from sleep in the morning, or, it may be, while he is at his usual employment or business, he becomes strange and incoherent, talks at random, mistakes things and persons, writes odd letters; in short, he displays unequivocally, by words and actions, that the mind is disturbed.

This state of delirium may speedily end in an ordinary paroxysm of epilepsy, with all its accompaniments, after which the patient resumes his wonted health; or it may continue for a considerable time, assuming even the characters of violent mania, with sleeplessness, exciting the utmost terror in the patient's family and attendants; or it may last for many days, and then the occurrence of an epileptic fit relieves all doubts as to the nature of the maniacal paroxysm.

It may be, however, that these phenomena will occur with a patient who is subject to epileptic attacks, in which case, if the fact be made known to the medical attendant, he will have the less difficulty in recognising the true nature of the paroxysm. And it may also happen that the delirium may pass off, or it may terminate in coma, from which the patient may wake up restored, without, in either case, the occurrence of any convulsive attack of epilepsy.

The delirium, in cases of this description, is, in general, of the most decided kind, and it often amounts to mania. The patient is wakeful, noisy, sometimes mischievous, sometimes muttering, incoherent and unintelligible, sometimes distinct and easily understood, the subject of his ravings being determined by circumstances or events which had previously occupied his mind a good deal.

This form of delirium is not, in general, accompanied by particular constitutional disturbance; the pulse is accelerated, but not to any great extent; its range ordinarily is from 80 to 100; it exhibits no character of strength, but is often full and throbbing.

The effects of any long continuance of this delirium are to induce exhaustion, as, indeed, is the

case with all forms of delirium, and patients often die suddenly, even when they may seem to be on the road to recovery. Hence they require the closest attention on the part of the attendant to prevent undue exertion.

A peculiar feature of this form of delirium is, that it comes on suddenly, without previous disorder, or without warning of any kind, as the epileptic paroxysm does. A man may be in perfect health, to all appearance, and within five minutes a furious and dangerous maniac. A remarkable case of this occurred to me in a medical gentleman, who was well known and much respected. He was a bachelor, about forty-five years of age; he had evinced no particular symptom of illness, but suffered some degree of mental anxiety. One afternoon, being engaged to dine out, he went up to his dressing-room to dress, and within five minutes his housekeeper was attracted to his room by a noise, and found him sprawling on the floor in a paroxysm of mania, shouting at the highest pitch of his voice, as if he had been assaulted by thieves. This case soon proved itself to be of the epileptic kind.

I shall mention another similar case which came under my care. A respectable, well-conducted man, about thirty-five years old, became, without any assignable cause, delirious at night. It was distinctly ascertained that he had not been drinking, nor had he been over-worked; but his wife thought he had been depressed and dull for the three or four days before the attack. A neighbouring Medical man bled him moderately; but without any effect upon the delirium. He was brought to King's College Hospital in a maniacal state; and it was thought necessary to restrain him by the strait-waistcoat. When I saw him on the following day I viewed the case as likely to prove of the epileptic kind. I removed all restraint, and, although much pressed to adopt an opposite line of treatment, I gave stimulants and opium. Under this treatment the delirium greatly subsided, and on the following day the patient had a severe epileptic fit, which was followed, on subsequent days, by several others.

A third case is as follows:—A man aged 24, a tailor, temperate in his habits and previously healthy, has had a hesitation in his speech since his childhood.

On the 10th of May, whilst at work, he was seized with giddiness and confusion of ideas. He ran out of the house in which he worked, and without knowing what he did, ran up and down the street, talking strangely. He continued in this state for a quarter of an hour, and then came to himself, feeling for some time afterwards depressed and shivering, with a mistiness before his eyes.

Next day he was attacked again with the same symptoms, but in a less degree, and he was admitted into the hospital, where, under a course of purgatives and a regulated diet, there was no return of the attack.

A country carman was walking alongside of his horse, through the streets in the neighbourhood of King's College Hospital, when he was observed by the policeman on duty to look bewildered, and to be unconscious of where he was going; he gave incoherent answers, and was evidently quite astray in his mind. On the policeman interfering to bring him to the hospital, he resisted with violence, and became quite furious. In this state he was admitted, and it was found necessary to restrain him. He continued violently delirious for about twenty-four hours, and then fell into a comatose sleep, from which he recovered in twenty-four hours more without any other treatment than shaving the head and keeping it cool, and the use of purgatives by enema, and afterwards by the mouth. When this man recovered, we learned that he had never had any similar attack previously, nor was there any evidence of intemperance.

I am in the habit of seeing frequently a pale, delicate lad, with large head, who about once in three months, whilst at work, is seized suddenly with giddiness and confusion of thought, followed by a delirious state, in which he talks incoherently, and his pupils become largely dilated, and the delirium passes into a state of stupor and drowsiness, leaving considerable weakness. Purgatives and tonics appear to exercise a beneficial influence upon him, and while he perseveres in the use of steel and quinine, the intervals between the attacks are lengthened.

When delirium occurs in patients subject to epileptic fits, it precedes or follows the paroxysm, or both precedes and follows it for very variable times. Sometimes the delirium ushers in the fit, and the patient is violently maniacal for some days previously; at others, the patient comes out of the fit in this state, which lasts a longer or a shorter time, the duration of the delirium varying, in both cases, from some hours to several days or weeks.

The frequent repetition of the attack in this form of delirium kills by exhaustion; or a single attack, if of sufficiently long duration, may kill in the same way, or the patient may die in, or immediately after, the epileptic paroxysm; but, in all cases, the immediate cause of death seems to be a state of exhaustion, induced by the exertion of the patient either in the delirium, or in the epileptic paroxysm, or more rarely a state of depression, accompanying the invasion of the delirium, as in cases where there is no violence nor any convulsion, as if the immediate cause which determined the delirious state, also exercised a depressing influence.

Now, we must particularly notice, that this delirium may pass off, leaving the patient in his normal state, with more or less of exhaustion, just as he would be after a common epileptic fit; or, if it end fatally, it leaves no lesion of the brain which is at all adequate to cause death—no softening nor other alteration of texture. In recent cases, indeed, the brain appears quite normal, with the exception of some variation in the quantity of blood in the blood-vessels, dependent on the circumstances which immediately preceded death. As a good example, to show that such an apparently normal state of the brain is quite consistent with severe and long-continued epileptic delirium, I shall adduce the sequel of one of the cases to which I have already referred. The patient, William Measures, was admitted in violent delirium. At the end of the second day, as this was subsiding, he had two epileptic fits, one of which lasted half an hour; the second five minutes. On the two following days he had a recurrence of the fits, which increased his exhaustion. In the evening of the fifth day he went off into a sleep so tranquil, that the nurse did not wake him to give him the stimulus ordered for him (℥ii brandy om. hora,) and he died rather suddenly during the night. The brain was very carefully examined after death, and no morbid appearance whatever discernible. The Pacchionian bodies were well developed, and the grey matter of the convolutions and elsewhere was pale; in all other respects the brain was one which no anatomist would regard otherwise than as healthy.

I shall have again to allude to this pallor of the grey matter as the most remarkable and the most frequent appearance which the brain presents after death from delirium. Sometimes there is with it a large quantity of subarachnoid fluid,—at other times there is a total absence of that fluid,—so that the pallor of the grey matter, which one might be tempted to attribute to a *post-mortem* infiltration by the subarachnoid fluid, has really no connexion with it.

Renal Epileptic Delirium.—In some of these cases of epileptic delirium we find albuminous urine, either only at the commencement of the attack, and disappearing as it goes off,—which I take to be the least frequent occurrence—or lasting throughout it and after it, and indicating the probable previous existence of chronic renal disease. They are true epileptic cases,—but the imperfect action of the kidney may be justly regarded as a highly probable exciting cause,—and so frequently do they occur, that in every instance of delirium, especially of the epileptic kind, the practitioner ought to inquire early into the state of the kidneys by careful examination of the urine. Whether a morbid state of the kidneys may properly be looked upon as the determining cause of the epileptic state and of the delirium?—this is a question which I shall reserve for another part of the inquiry, suffice it now to say, that the ascertained co-existence of renal disorder with epileptic delirium, is an important feature of such cases, and that clinical research leads us to regard it as an unfavourable omen with reference to the issue of the case. For these reasons, I propose to distinguish this affection by the title of *Renal Epileptic Delirium.* The following case is a good example of this form of delirium:—

George Addis, aged 43, of intemperate habits, who followed the occupation of a waiter at places of public entertainment, had been in a low, gloomy state for some time, in consequence of having been robbed of a sum of money which he had saved. One evening, whilst performing his duties as a waiter, he became incoherent and odd in his manner, and let a tray of glasses fall from his hands. Soon after this, he had two or three epileptic fits, and a day or two following he was sent into the hospital. On his admission he was quiet, but not coherent; rather inclined to sleep. On that day, the 1st of December, he had two epileptic fits of short duration; next day he remained in much the same state; a little more excited, and knocked his head frequently against the wall or bed; fidgetting about in the bed and staring about him in a vacant manner. At night he became so restless as to require the constant attendance of one person, and he was noisy. Next day he became still more noisy, appearing scarcely sensible; he was evidently unable to continue any train of thought. On addressing him loudly, he would begin the answer to a question correctly, but soon pass to some other subject, or become sleepy.

On the 4th day of his admission the epileptic fits recurred, and he became comatose in the intervals and much prostrated, and died in the coma succeeding the fit.

From the time of his admission the urine was highly albuminous.

The brain, upon careful examination, afforded no mark of disease; the membranes were healthy; the grey matter of the convolutions pale. There was slight hypertrophy of the left ventricle of the heart, and some puckering of one of the aortic valves.

The kidneys exhibited an early stage of chronic nephitis.

Delirium in Chorea.—Delirium, like that of epilepsy, occasionally occurs in the allied malady of chorea. In the cases of general chorea it is developed in the latter stages of those violent shakings which kill the patient by exhaustion.

I have met with one case of severe delirium which was ushered in by symptoms of chorea, and was successfully treated on a plan similar to that which I have adopted with benefit in severe cases of chorea.

The patient, Benjamin Channon, was twenty years of age, admitted January 27, 1847; by occupation a saddler. He never had epilepsy, but eleven years prior to his admission had chorea, which affected his intellect to such a degree that he became almost idiotic, and was under treatment for three months in the Middlesex Hospital, leaving it perfectly restored. Seven years afterwards he had another slight attack, without any impairment of intellect. A month before his admission the choreic symptoms began to re-appear; the first indication being, fidgetty movements of his fingers, which were soon followed by characteristic jerking movements of the upper and lower extremities, especially those on the right side, and also of the muscles of the mouth. These symptoms having continued for a month, on the morning of the 26th of January he suddenly took it into his head that a conspiracy had been formed against him. He jumped out of bed, and rushed down stairs into the street in his night-shirt. He was with difficulty captured, and brought to the hospital in a state of furious and frantic delirium, talking and shouting out, and sometimes he would quote Shakspeare, in whose writings it appears he was learned; then he would sing and whistle; again he would assume an angry mood, and bite and snarl at all who came near him, and at the bed-clothes and the strait waistcoat with which he was restrained.

The choreic convulsive movements were still present, and he put out his tongue with that peculiar thrust which is characteristic of this disease. This state of delirium lasted several days, and was accompanied with such great exhaustion that I was compelled to administer food and stimulants very frequently, and in considerable quantity. To a treatment of this kind—to which was added cold affusion twice a day for three or four days, a plan which I was led to adopt from the idea of the connexion of the delirium with chorea—the symptoms yielded

steadily, so that in a fortnight all signs of delirium had disappeared, and in a month the choreic symptoms had completely vanished.

(To be continued.)

ORIGINAL CONTRIBUTIONS.

DESULTORY SKETCHES.

By DR. BUSHNAN.

MESMERISM.

(Continued from page 276.)

Simple as are the dupes of Mesmerism, it is impossible to suppose that even they could be long deceived by a system altogether destitute of truth. It must, however, be freely confessed, that there is some sprinkling of truth in Mesmerism; and thereby it is that it becomes the readier snare to the weak and inexperienced. There are two unquestionable axioms, which should be ever present to the thoughts of those who feel themselves exposed to be drawn into the vortex of mesmeric delusion—the one is, that when a statement false in the main is mixed up with one or two propositions, not at once obvious, yet proved at the moment to be true, a man is in danger of believing the whole that is affirmed. The other is, that strong and repeated assertion, even by a person of the smallest possible pretensions to authority, can hardly be resisted by the human mind, when it turns on points on which the individual addressed has no previous experience. These are two antidotes to Mesmerism. Let the first be adopted as a guide till the experience referred to in the second be attained—that is, till some knowledge has been acquired of the nature of the phenomena in the human economy over which Mesmerism pretends to hold control.

What, then, is the amount of truth in Mesmerism? It is true that there are some mysterious parts in the mental constitution of man and woman kind which may be acted on by various causes, often in appearance of no great power, so as to originate effects very different from the controlled orderliness of thought and feeling observed in the minds of the same individuals when engaged in the ordinary intercourse of society. These mysterious parts of the human mental constitution are brought into operation in reverie, trance, dreaming, nightmare, sleep-walking; in the alternate bursts of sobbing and of laughter, and in the mimotic phenomena in general of hysteria; in the leaping-ague, in the aberrations concomitant on the epileptic paroxysm, and in other convulsive and imitative diseases. The power with which slight causes operate on a susceptible nervous system, to the production of powerful effects, is illustrated by the irresistible fits of laughing and other convulsive movements produced by tickling some of the more sensible parts of the surface of the body. There is, perhaps, nothing more wonderful in the production of the trance, termed "mesmeric sleep," in susceptible persons, by a few passes made before the eyes, than in that of the violent state of excitement sometimes observed by so slight an act as tickling the soles of the feet. But, as to the pretended clairvoyance, and the transference of sense, there is nothing more in them than what results from chance coincidences between real circumstances or real events and the drowsy fancies excited by substantial impressions made on the senses in the mesmeric trance, analogous to the well-known accidental coincidences—particularly when dreams are cultivated—and the actual circumstances or events with which the individuals concerned are familiar when awake.

The only important admission, then, that can be made in favour of Mesmerism is, that it is highly probable that in susceptible individuals a state of insensibility may sometimes be produced so great, that even the pain of surgical operations is not felt. Chloroform produces a more perfect insensibility to pain, with greater certainty, and, as it would seem, in every kind of constitution; and, while it is entirely safe when in a state of purity and rightly administered, it has this advantage, that it may be made to operate at once on the nervous system without the excitement of such mental feelings as may have after ill consequences. It is needless to raise the question, whether the insensibility produced by chloroform be identical with that of the mesmeric trance. It is at least certain that the mesmeric trance is not natural sleep, and that the mode in which it is brought on is, in a medical point of view, highly objectionable. Long before Mesmerism arose, the state of trance was known as a morbid condition. It plainly is allied closely to night-mare and sleep-walking, as both these are to epilepsy,—one of the most dreadful diseases to which mankind is subject. Epilepsy, and some allied diseases, are well known to be brought on by mere imitation, and to be perpetuated by habit. Nor is there any precept in medicine better founded than the injunction, by every possible precaution to protect those endowed with an unusual susceptibility of the nervous system from the operation of all those causes of excitement by which morbid habits of action, as readily happens, may become established in their constitutions. The mesmeric trance is not merely analogous to hysteria; it is, in fact, a form of hysteria; and it is well known, that nothing serves so much to increase the frequency of hysteria as indulgence in the feelings to which the over-susceptible are unusually prone, and the neglect of those efforts of self-control which every woman who escapes hysteria must have so often exercised. For a woman to subject herself to the passes of a Mesmerist, is to reverse this precept.

So much of truth, then, there is in Mesmerism—the rest is all delusion, collusion, fraud, and imbecility.

As to the cure of diseases by Mesmerism, it is contemptible—as to the diagnosis by the same, it is worse than contemptible. The latter implies a supernatural clairvoyance, the grossest delusion that ever entered man's imagination; the former, in its most limited sphere, namely, as a means of exciting the imagination, may have sometimes a temporary success in mere functional paroxysms, on the same footing as the swallowing of live spiders, millepedes, or mice,—remedies not unknown in former ages. But, even within this limited range, the risk is greater than the advantage. And no one who knows the great truth, that it is Nature that cures diseases, when the patient happens to be, or is designedly placed in circumstances favourable for the unembarrassed exercise of the healing power inherent in the human constitution, need be at any loss to understand the slight foundation on which the partizans of Mesmerism claim credit for it in occasional cases of recovery.

I have throughout treated clairvoyance—the favourite hobby of the Mesmerists—with simple contempt, as I cannot but think it deserves. If they complain of this treatment as unphilosophical, why do they not apply their pretended illumination to some case which the public can understand and participate in. An excellent opportunity exists, at present, for an *experimentum crucis* on the subject. The whole country trembles with interest as to the place and condition, at this moment, of Sir John Franklin and his companions, as well as for the success of the several expeditions now dispatched, or about to be dispatched, for their relief. Let the Mesmerists publish daily or weekly accounts of the proceedings of Sir John and his companions, or, if unfortunately they are no more, of the expeditions now in search of them,—and surely, if their boasted clairvoyance be concentrated on this one point, they cannot fail, if there be any truth in their so oft-repeated assertions, to mitigate the public anxiety in the meantime, and to establish their doctrine to the satisfaction of all, when, on the return of the ancient mariner, or those in search of him, the ship's log shall be found to tally to the letter with the declarations obtained through clairvoyance.

But there is another phase in which it behoves us to regard Mesmerism, as advocated by its professors; and I propose to take an early opportunity of considering the infidel and impious doctrines propounded with so much unblushing effrontery in the *Zoist*.

7, Nottingham-place, Regent's-park.

HOSPITAL REPORTS.

KING'S COLLEGE HOSPITAL.

FEMORAL HERNIA.

This was the case of a woman, aged 50, who had for some years suffered from a small crural hernia of the left side, which she could never entirely reduce, though she has been able to lessen it by continued pressure. On five or six occasions she has been troubled with rather severe symptoms, consisting of sickness, constipation, and uneasiness in the tumour. She usually obtained relief by slight purges, and other means which she employed herself.

Six days ago, before she applied, it increased while she was doing some heavy household work, and sickness came on in the middle of the day, which, towards night, became stercoraceous. The bowels previously had acted regularly once a day, but have not been open since the symptoms of strangulation came on; the sickness continued frequent and stercoraceous up to her admission. At this time the swelling was become rather painful and œdematous. She had no shivering, and her general symptoms did not seem in accordance with the dangerous character of the hernia. When she came to the Hospital Mr. Beale, who was acting as House Surgeon, had her placed in a bath, and gave warm water enemata, which brought away fæcal matter, but produced no effect on the tumour. Very slight attempts were made to reduce the hernia by taxis, its peculiar character forbidding any perseverance in this plan of procedure. When we saw the woman just before the operation, she did not appear to suffer much, nor was the countenance pinched and anxious. Pulse was small and compressible, but regular. Skin moist and cool. Tongue slightly furred. Abdomen somewhat distended, tympanitic and tender on pressure. Passed her water regularly, and in as large a quantity as usual. The skin over the tumour, which is situate in the usual position of femoral hernia, is red and inflamed, and has a doughy feel, with indistinct fluctuation, as if matter were present, and the cellular tissue over it infiltrated. She complained of tenderness on pressure, which had no effect in diminishing the tumour. On coughing it is increased. Mr. Fergusson decided on operating, as the only means of affording relief, though the prognosis was unfavourable. He therefore proceeded by making an angular incision through the integument and infiltrated cellular tissue, when a quantity of fetid pus issued out. The tissues were next divided down to the sac, which was opened, and a smell as of fæces perceived, and a quantity of oily matter issued out. The loop of intestine, and omentum which was within, did not appear gangrenous, though very soft to the touch. When the stricture at the neck of the sac had been divided, and Mr. Fergusson was pressing up the gut, a quantity of liquid fæcal matter came out, and the woman straining at the time, though under the influence of chloroform, a larger portion of intestine was forced out. Being unable to find the orifice in the bowel, the intestine was partly pressed back, and the wound closed with sutures. The woman died six hours afterwards.

This is a striking case, as showing the power which some persons have of bearing up against severe injuries. This woman had stercoraceous vomiting, and other symptoms of strangulation, for six days before she applied for advice, believing that she would recover, as on previous occasions. Up to the time of the operation, her countenance remained natural, free from any expression of anxiety, and her manner was similarly indifferent. Indeed, the constitutional disturbance, except the vomiting, was not so great as in some cases of suppurating glands in this locality, which the local characters of the hernia much resembled.

LITHOTRITY.

The subject of this operation was a middle-aged man, who had laboured under symptoms of stone for a long time. Mr. Fergusson deeming it a favourable case, had, on several occasions, crushed the stone; but the man having been compelled to return into the country almost immediately after each operation, it was not possible systematically to follow up the treatment. The consequence was, that fragments had each time been left behind. It

was six months previous to his admission, that the stone was last crushed. This operation has been three times performed on the man during the past fortnight, causing little pain, and no subsequent bad symptom, and he has now left the hospital free from every symptom of calculus in the bladder.

Mr. Fergusson, in some observations which he made subsequently to the second operation, adverted to the various methods which had been used for the solution of vesical calculi by chemical as well as by mechanical means. Gruithuisen, who believed that simple water had the capability of dissolving stones, thought that it would be more quickly successful if applied with force in a constant stream. For this purpose he proposed to carry a stream through the double canula from a cistern on the top of the house. Others had used weak injections of soda, caustic potash, nitric acid, &c., with benefit in some cases, but they were generally not to be depended upon. The double canula was used in this case to wash out the bladder, after crushing the stone. The water was thrown up it by means of a Read's enema syringe adapted to the canula, which appeared to be the most convenient apparatus for the purpose. The lithotrite was removed on each occasion with several fragments of stone in its grasp,—a plan which may save the subsequent introduction of the scoop for the same purpose.

GUY'S HOSPITAL.

VENTRAL HERNIA WITH RUPTURE OF THE DIAPHRAGM.

A man, aged 25, was admitted to the Luke Ward, on January 25, under Mr. Cooper. He had only just recovered from an attack of rheumatic fever, when on coming to London to seek for employment as a whitesmith he met with the following accident. A baker's cart was upset, and while rendering assistance the man fell, with a loaf of bread between his abdomen and the ground. As he lay in this position the horse making a plunge, and falling upon him with great force, he felt something give way in his abdomen. On the horse being removed he was unable to get up, and he found that a tumour had appeared in the left groin. There was not any hernia previously. He came to Guy's an hour after the accident, and when Mr. Cooper saw him there was discovered a scrotal hernia of the left side. Its point of escape from the abdomen was more external than that of an ordinary oblique inguinal hernia. It was diagnosed as being a ventral rupture. On his admission it was about the size of a small apple, flaccid, yielding, and might probably have been returned into the abdomen with facility; but Mr. Cooper considering that there was a possibility of ruptured intestine, thought it advisable not to do so, especially as the patient was in a partial state of collapse, cold, with a slow, small, feeble pulse, and quick thoracic respiration. There was no evidence of fractured ribs. Warmth was ordered to be applied, and sal ammoniæ administered. An hour-and-a-half after he had become rather warmer. Pulse 60, small, with a peculiar sharpness; respiration thoracic, performed in short catches; great tenderness in the left inguinal region. Twenty leeches were applied to the painful part, followed by a large linseed-meal poultice to cover the abdomen One grain of calomel and half a grain of opium were given in a pill every four hours.

At seven the same evening, six-and-a-half hours after the accident, the countenance was distressed and anxious. Respiration 26 in the minute, short and thoracic. He could only speak two or three words continuously, on account of interruptions, occasioned by his laborious breathing and frequent hiccough. These symptoms rendered it probable that the diaphragm had been ruptured. Pulse 64, small, feeble, and thready. Tongue with a slight white fur. He was ordered to be bled to twelve ounces. Immediately after the bleeding the pulse increased in volume, became softer, and more frequent. To omit the pills. Early the next morning the hernia appeared to be much smaller, and to have receded from the scrotum; in the after part of the day it returned to its former condition. The abdominal muscles are hard, resembling tetanic rigidity. The tenderness is more extensive. There is thirst and dysphagia. The tongue is white and moist. Pulse 70, small and sharp. Respiration 26. The same evening he passed a copious solid stool. On the following day, the hernia had again partially receded, but the tenderness had become greater and more extensive. He had slight delirium in the night. On the 28th he was considerably worse. Countenance anxious and distressed. Extremities cold. Pulse small and feeble. Respiration 48 in the minute. He has been more or less delirious all the day. Bowels not open. Mr. Stocker was sent for, but, being absent, Dr. Gull saw him, and prescribed a draught containing sal ammoniac, with twenty drops of laudanum, to be taken immediately, and, if the collapse should continue, a little brandy in the course of an hour. When seen at ten o'clock the same evening he remained much in the same state. Some brandy-and-water was given him, which he swallowed with difficulty. Has the appearance of a dying man. The hernia can be completely returned, but it immediately protrudes again when the pressure is removed. In the course of the following day he became better. Skin warmer. Pulse fuller and stronger. Respiration thoracic, 48 in a minute. There is a large prominence in the situation of the cæcum. He feels a desire to go to stool. Was ordered to resume the calomel and opium pills, with half the quantity of the opium. The symptoms continuing urgent, after a consultation with the physicians and surgeons, it was determined that an exploring operation should be performed, to see if the intestine was strangulated, but the patient would not consent.

31st.—Much improved; countenance less anxious; hernia entirely gone; pulse 70, small and weak; respiration the same.

Feb. 2.—There was yesterday a diffuse prominence in both iliac regions, caused by accumulation of fæces. The bowels have not been open since the 26th. A castor-oil enema was exhibited, and followed by a copious evacuation. He feels better, but has frequent nausea and occasional vomiting.

11th.—The bowels are acting every other day; but defæcation causes him extreme pain in the abdomen, and he has some sickness. The general abdominal tenderness is less. The hernia sometimes entirely disappears. The respiration still retains its peculiar character, and indicates a rupture of some of the fibres of the diaphragm. It is difficult, short, and in catches, with uncertainty of speech, about 42 per minute. Pulse as low as 51.

23rd.—The hernia still comes down, but is readily reduced. His general state is decidedly improved, though the breathing retains much the same characters, and is 48 in a minute. When the bowels get confined for two or three days, the abdomen becomes tense, and the bowels are afterwards relieved with considerable pain, of a tearing, dragging character. Is taking fish, and a pint of porter daily.

April 10.—The nausea and some vomiting continue. The hernia becomes very prominent when he walks. He complains of a sense of tightness or constriction about the abdomen, as if the intestines were matted together. His walk is improved; but the stuttering and hesitancy of speech, arising from the diaphragm, with the sharp, quick breathing, still continue. There is no other symptom of cerebral disease. To have a truss.

INJURY TO THE ABDOMEN.

A policeman, aged 26, was admitted into Cornelius Ward, under Mr. Cooper's care, March 12, 1850, about half-past eight, a.m., suffering from an injury to the abdomen.

He was this morning, about a quarter past six, coming off duty, when a fellow-constable knocked off his hat, which he picked up. The same man then seized hold of his belt, which trying to regain, he was tripped up by the other's foot, and fell on his back; the aggressor, also losing his balance, fell with the right knee on the patient's inguinal region. On admission, he complained of great pain, which was of a sharp lancinating character, across his loins, extending round to the left iliac region, and very much increased on pressure. The rest of the abdomen was free from pain. He was quite sensible, without any anxiety of countenance, but pale and cold; his pulse was small and feeble; he had passed his water immediately before the accident. He was directly placed in bed, enveloped in a blanket, had hot-water bottles applied to his feet, and was ordered julep ammon. and catap. lini. to the abdomen. In the evening he had rallied, and his pulse was now full and regular, but the pain still continued, though somewhat diminished in intensity.

He passed a restless night, chiefly on account of pain in the left iliac fossa, extending to the loins. His bowels have been opened; the motion was scanty and tinged with blood. He has passed no water since his admission. He complains of thirst. Tongue is furred; pulse 90, full. Mr. Cooper directed that he should be cupped to twelve ounces, to be followed by eight leeches if relief were not obtained, and also a large linseed-meal poultice to the abdomen. In the evening he was easier, the cupping appearing to have relieved him.

Early the next morning he passed about sixteen ounces of urine slightly tinged with blood, which continued to be the case for three days afterwards. The bowels remained confined. The pain in loins became less. On the 17th diarrhœa supervened, the motions not being mixed with blood. It was readily checked by administering five grains of Dover's powder after each motion. He complained of weakness, but he continued to improve until the 22nd, when the pain slightly returned, accompanied with constipated bowels. He was ordered half an ounce of decoction of aloes, with the same quantity of sarsaparilla, twice a day; eight leeches to the loins; and a pint of porter, the pulse being weak and compressible. The bowels acted well with this mixture, which he only took occasionally, and he improved so much that he thought of leaving the hospital. However, on the morning of the 29th, when at chapel, he was suddenly seized with intense pain in the original seat of the injury, accompanied with general depression and a sense of coldness down the left thigh. The pulse became feeble, the skin cold and clammy; so much so, indeed, that it led to the suspicion that some rupture had taken place in the abdominal cavity. He remained in this state for upwards of two hours, when reaction was brought on by wrapping him in blankets, applying hot water to the feet, and exhibiting ammonia.

After this, he made a favourable progress towards recovery, and has now left the Hospital perfectly well. The tenderness about the left iliac fossa hung about him for some days, especially after action of the bowels.

PROGRESS OF MEDICAL SCIENCE.

FRANCE.

[Paris Correspondence.]

TREATMENT OF ANEURISM BY ELECTRO-PUNCTURE.

The interesting question of the treatment of aneurism by galvano-puncture seems destined to prove how intimately connected Medicine and Surgery are in the practice of the healing art. Since the discovery of Hunter, aneurism appeared to be a disease exclusively within the range of the Surgeon's practice; but now Medicine may fairly claim her share in the treatment of a malady which, at one time, was not to be remedied without knife and ligature.

Surgeons, however, are very tenacious of their own possessions, though they scruple not to trespass on the domain of their brethren; and, accordingly, they showed fight in great force, at the Academy on Tuesday last, when the relative merits of the Surgical and Medical treatment of aneurism were discussed at much length. An analysis of the debate, and of the opinions entertained by the two sections of the Academy, may be acceptable to your readers.

The history of the treatment of aneurism by galvano-puncture does not go far back. M. Pravaz appears to have been the first practitioner who proposed employing the electric needle for the purpose of coagulating the blood in aneurismal sacs. This was in 1838. In the same year, Mr. Liston and Mr. Phillips attempted to apply the method to aneurism of the carotid artery, but Mr. Phillips's patient died before the ligature could be applied, and Mr.

Liston was forced to tie the artery, electro-puncture having failed in both cases to produce the desired effect.

Several other attempts appear to have been equally unfortunate, and the method would probably have fallen into disuse had not the researches and successful operations of M. Petrequin rescued it from oblivion.

The first case on which M. Petrequin operated was an unfortunate one. The patient was affected with aneurism of the opthpalmic artery. Ligature of the carotid gave only temporary relief. Electricity was now tried, and the case was progressing favourably, when the patient was cut off by fever in two days. This did not discourage M. Petrequin. He continued his experiments, and cured an aneurism of the popliteal artery, two aneurisms of the brachial, and one of the temporal. In a fifth case, —one of aneurism of the brachial artery also,— it became necessary to take up the vessel, as the method failed.

Many other surgeons have employed the same mode of treatment; but not with the same success as M. Petrequin. Thus, when M. Velpeau tried it in a case of popliteal aneurism, suppuration of the sac, followed by rupture, ensued, and the same effects have followed the majority of operations performed by the Italian surgeons.

The most remarkable case, however, is one related by M. Abeille, one of the physicians attached to Val-de-Grace, who effected a solid and permanent cure on a patient labouring under aneurism of the left subclavian artery. It was the Report on this case, drawn up by M. Roux, which gave rise to the discussion alluded to above; for the conclusion of the Report appears to be severe beyond all measure. M. Roux concludes, that electro-puncture should be banished altogether from the treatment of aneurism, on account of the accidents which follow its employment in a majority of cases.

Upon this sweeping conclusion the debate proceeded, and it was not difficult to demonstrate that M. Roux's surgical prejudices had carried him far beyond reasonable bounds.

M. Velpeau confessed, that in the case which had occured in his practice, he had employed only one-half the method; in other words, he merely stuck in a number of needles, but did not apply electricity. Hence, no wonder that inflammation of the sac, gangrene, and death ensued. As for desperate cases, like that of M. Abeille, where ligature was impossible, M. Velpeau assured the Academy, "that he had a tendency to accept electro-puncture as a *pis-aller*." "Thank you for nothing," M. Velpeau, as Dan O'Connell used to say. Here is an operation which rescues your patient from certain death, and you have a *tendency*, forsooth, to accept it as a *pis-aller*. Your patient, at least, would be of another opinion.

The possibility of coagulating the blood in aneurismal sacs, in cases where a ligature cannot be applied between the sac and heart is, one would imagine, a peremptory reason for having recourse to the new method in all such cases; because Brasdor's operation, the only chance left, has constantly failed, when applied to aneurism of the subclavian artery. Besides this, it may be fairly asked, where is the serious operation which is perfectly free from all objections? Those reproached to electro-puncture are, that it causes very severe pain, and often inflammation of the walls of the sac. But, is it not well known, that the ligature is occasionally—it might be said often—followed by secondary hæmorrhage in cases of subclavian and inguinal aneurism? Besides, the more recent experiments of M. Petrequin, recorded in a former Number of the *Medical Times*, appear to shew that galvanism, not electricity, is the agent which should be employed for coagulating the blood; and that by managing this agent in a proper manner, we may avoid in great measure the severe pain, and, what is of more importance, the danger of suppuration and gangrene of the sac. The application of galvanism to the coagulation of blood is yet in its infancy, and it is impossible to say whether the researches now being made may not remove all the objections which exist against its employment. These, and many other arguments, *quod enumerare longum*, carried conviction with them, and M. Roux's report was modified by amputation of the obnoxious clause, which seemed to electrify the honourable Academician in no small degree; for it is many a day since a man of his standing received such an affront.

NUTRITION.—CURIOUS EFFECTS OF COFFEE.

Some important points connected with the interesting subject of nutrition were raised at the last meeting of the Institut. M. de Gasparin, in a visit which he made some time since to the mining districts of Belgium, observed that the Belgian miners are properly supported, and at the same time strong, healthy, and vigorous, on a diet which furnishes only one half of the nutritious principles derived from the food taken by workmen in other parts of Europe.

M. de Gasparin appears to adopt the theory of Liebig, and regards nitrogen as the essential element of nutrition. The quantity of this principle contained in the food of workmen varies considerably. Thus, the English workmen employed on the Rouen railway consumed 100 parts of nitrogen to every 1887 of carbon; whereas, for the Irish workmen the proportions were 100 to 3942. On the other hand, very extensive researches throughout France have proved that the daily ration of the French workman furnishes from 20 to 26 scruples of nitrogen; and this may be taken as the average standard. Now, what occurs in Belgium? The daily food of a Belgian miner contains only 14 4-5th scruples of nitrogen, or nearly one-half less nutritious principle than that of the French workman. The Belgian's food consists in bread, potatoes, and meat once a week; the whole containing little more than 14 scruples of albumenoid principles; whereas, even the monks of *La Trappe* consume 15 scruples daily. The daily ration of prisoners in France furnishes 16½ scruples.

For such a remarkable difference there must be some valid reason, and M. de Gasparin thinks he has found an explanation in the quantity of coffee which the Belgian miners consume every day. This often exceeds two quarts, mixed with a small proportion of milk. But coffee is not a nutritious substance. How then does it act? According to our Author, by preventing waste, and thus rendering active nutrition unnecessary. This theory appears to be supported by the experiments of Boekers. Persons who did not take coffee passed 22·275 of urea, 0.587 of uric acid, and 1·291 of phosphoric acid. On the other hand, the same persons, when abundantly supplied with coffee, passed in their urine only 12·585 of urea, 0·402 of uric acid, and 0.854 of phosphoric acid. The waste of the different tissues is therefore greatly diminished during the use of coffee, and the necessity for food rich in nutritious principles is consequently less. Other substances, particularly garlic, appear to enjoy the same property; while, according to the experiments of M. Barral, the use of salt gives rise to an opposite effect, increasing the urea and uric acid very considerably.

CHOLERA HONOURS AT BORDEAUX.

The Corporation of the City of Bordeaux has struck a handsome silver medal, which has been presented, in the name of the city, to all the Medical men who distinguished themselves during the prevalence of Cholera at Bordeaux and the environs. The example, it is said, will be followed by many of the principal municipalities of France. Our worthies at London are too liberal, I guess, to think of any similar expression of gratitude. Yet the crumbs from underneath a "Lord Mayor's" table would almost cover the expense.

MINERAL WATERS.

The Minister of Public Instruction has directed that four students in medicine and two in pharmacy shall be attached, at the public expense, during the summer months, to the four mineral-water establishments belonging to the State. These are Vichy, Plombiers, Bourbon, and Neris. The appointments will be filled up by concours, and their object is to give medical aspirants an opportunity of studying the effects of mineral springs.

THE FRENCH AT ROME—FEVER.

The unfortunate expedition to Rome appears to have cost the French army a greater loss from fever than on the field of battle. From official returns, just published, it appears that between the months of June and December, 1849, no less than 14,848 soldiers were attacked by the marsh fever of Rome, and that 781 of those attacked died. The wretched condition of the soldiers who, for several months, were allowed to remain without either bed or covering, appears to have been the chief cause of the prevalence of fever to so great an extent. At one period more than an eighth of the whole army was in hospital, and the average mortality was exactly 5 per cent. The fevers were of the same kind as those which prevail amongst the French troops in Africa; but it is worthy of remark, that miasmatic fever is daily becoming less frequent in Africa, from attention to drainage, &c.; whereas, to all human appearance, it will never disappear from the Campagna Romana under the fostering care of the Church.

M. SEDILLOT.

Your Article on M. Sedillot, which has found its way to the Institut, has caused no small surprise among the worthy *savans* of that body, for none of the Medical members, it would appear, had the most remote idea of the enormity of their own and M. Sedillot's ignorance. I employ the term "ignorance" in preference to that of "plagiarism;" for I am convinced, that the Strasbourg Professor had no idea whatever that his discovery had been made some fifteen years ago by a *confrère* in London. French Practitioners, as I have often remarked,—nay, French Professors,—for the most part, are profoundly ignorant of foreign Medical literature; and it is more than probable, that M. Sedillot had neither seen the volume of the *Medico-Chirurgical Transactions*, to which you allude, nor the modest Manual of Professor Fergusson. The Strasbourg bird must now shed the brightest feather in his tail; but in charity we are bound to conclude, that it was borrowed, not stolen. M. Roux, I understand, is to mention the subject to-morrow at the Institut.

And here I may observe (parenthetically) that a similar ignorance of what has been done by, or is known to, foreigners, prevails in other branches of science, as well as in Medicine. The discovery of Melsens, for example, which M. Dumas, the Commission, and the French ministry itself, had led the public to regard as one of the greatest products of modern science, was long ago accurately described by Dr. Evans, in his work on Sugar. Experience, moreover, has decided the question, while the French are preparing to solve it. I have just received letters from Calcutta, which announce that two of our first Indian manufacturers have given the matter a fair trial, and found the process inapplicable. One example more. The grand Prize Committee of the Institut decided, the other day, that no notice could be taken of a work by Dr. Moreau, on *Hashish*, because the therapeutic properties of Indian hemp were as yet entirely unknown. English practice, one would think, might furnish sufficient data; unless, indeed, our neighbours conclude—as many of them do—that what is unknown in France is unknown in the rest of the "universal world."

But let us be just. If literary ignorance abounds here, you have men, on your side the water, who seem plunged in a depth of stupidity incompatible with the ordinary avocations of civilised life. Here people say, "*Bête comme un epicier.*" There you may fairly exclaim, "As great an ass as an alderman;" and, of the whole breed, Mr. Lawrence seems the worthy sire. Here, an "*Epicier*" is considered such a stupid brute, that people disdain turning him into ridicule. The same contempt may fairly be extended to our aldermanic ass; and if I allude to such a quadruped, it is merely to answer your question,

WILL THE CHOLERA RETURN?

If we proceed, as in a formula, from known to unknown quantities, it may be concluded, that a return of the visitation is not only possible, but probable; and you may inform the Corporation of London—if, indeed, they be capable of understanding the bearing of the fact—"that the cholera has broken out for the second time with the greatest violence" in one of the German cities on the miasmatic high-road between India and England. What has happened in Germany, may happen in Great Britain, and the conduct of our authorities does not prove that we have done anything to merit exemption from the pestilence. The same wise Providence which has sent epidemic disease among us, has, at the same time, provided means of preserva-

tion. The Plague has been eradicated from Europe. French medical science has prevented its eruption from Egypt for the last ten years. Marsh fever, just as deadly a complaint as cholera, has been banished from many parts of northern Africa, and will, after some years, have entirely disappeared, despite the climate. Around Rome it has re-appeared, through the neglect of man. With these and many similar facts before us, can any one be so ignorant as to affirm, that it is useless to prepare against the visitations of disease, or so perverse in mind as to insinuate, that the best way of perpetuating an effect is to annihilate its cause. You will therefore, I trust, persevere in your support of Mr. Simon, and insist on the necessity of hygienic measures. Dropping cases of cholera occur here from time to time—a proof that the peculiar cause of the disease still exists, though in feeble quantity; and rash indeed must be the person who shall declare us free from all danger for the future.

TREATMENT OF RECTO-VAGINAL FISTULA.

M. Jobert, formerly of St. Louis, but now attached to the Hôtel Dieu, has long been celebrated for the peculiarity and success of his treatment in those difficult cases arising from destruction of the recto-vaginal septum. At the last meeting of the Institut he read on the subject a long memoir, of which the following analysis may be acceptable to your surgical readers.

The first object of the practitioner in all cases of the kind now under consideration, will be to remove any complications of a constitutional nature which may exist. This done, the surgeon may proceed to operate after the method of M. Jobert, which consists essentially of three parts, viz., refreshing the edges of the wound—uniting them by suture, and relaxing the neighbouring tissues by means of incision.

Having made every necessary preparation, and introduced a single-valved speculum, for the purpose of raising up the superior wall of the vagina, the bladder and its neck, M. Jobert commences with

Refreshing the Edges of the Wound.—When the fistulous opening is easily got at, the edges are brought to view with hooks, and the whole of the cicatrix removed to some distance beyond the edges. In more difficult cases an assistant is compelled to pass his finger into the rectum, and press the recto-vaginal septum forwards and downwards, so as to bring the fistula towards the orifice of the vagina. Whatever bleeding may occur is easily arrested by

The Suture.—M. Jobert invariably employs the interrupted suture. The points of suture should be sufficiently numerous to keep the edges of the wound well in contact, without, at the same time, exciting too much inflammation. For two inches of fistulous opening three or four points will be sufficient. The ligatures should be well waxed and rather broad, so as not to cut through the tissues too readily. They are applied by introducing two fingers into the rectum, and then piercing the edges of the wound from the rectum towards the vagina. Each ligature is armed with two needles. The blood is now removed by injections of cold water, and the surgeon proceeds to tie the ligatures. The edges of the wound must, however, be first brought carefully into contact, and great care must be taken that the first knot has not become loose.

Relaxation of Tissues.—Whether the fistula be transverse or longitudinal the surgeon now proceeds to make a certain number of incisions, according to the extent of substance lost. The walls of the vagina may be relaxed by transverse or perpendicular incisions; but the surgeon should not forget hat the walls of this organ are thin on the sides and behind, while they are very thick inferiorly. He must also bear in mind that the rectum lies closely applied to the vagina along three-quarters of the recto-vaginal septum, and that in some individuals it presents several bulgings forward, or irregularities of calibre.

The first step of the operation consists in pushing up towards the pubis, as high as possible, the soft parts, and this is done with a single valved speculum. The posterior wall of the vagina is then fixed, and depressed with a hooked forcep, if the incision is transverse, or carried alternately to right and left, if the incision be perpendicular.

Transverse Incision.—As the peritioneum in some cases descends lower than usual, or may be pushed downwards by a variety of causes, the transverse division of the vagina should always be made a little *below* the lower edge of the posterior lip of the os tincæ, and the knife be directed from above downwards, not from below upwards. The incision here should never penetrate more than two milimetres beneath the surface; nor be extended laterally beyond the breadth of the os tincæ.

This incision will bring into view the anterior wall of the rectum, and the upper part of the recto-vaginal septum may now be brought downwards by gentle traction.

Lateral Incisions.—These must be a little longer than the fistula, and be made obliquely from within outwards, so as to avoid the rectum. The surgeon will ever bear in mind the thickness of the vaginal wall, which diminishes from below upwards. He must pay no attention to the erectile tissue of the vagina, nor to the small vessels that are inevitably divided. If they bleed too much they must be tied or twisted.

The dressing after the operation is very simple. The surface of the vagina is cleansed with cold-water injections, and an agaric plug is passed into the vagina, to restrain any effusion of blood which may continue. The plug is withdrawn on the following day, and emollient injections thrown in, should suppuration commence. The patient must be catheterised several times a day, or a gum catheter be kept in the bladder.

It is absolutely necessary to keep the bowels confined until the ligatures have come away. Hence M. Joberts always purges his patient before the operation, and administers opium after it. On the sixth day after the operation, the first ligature may be removed, and the others successively; a day intervening between the removal of each.

M. Jobert has operated on a large number of patients affected with recto-vaginal fistula, and in most cases with success. One remarkable case, in which the fistula was seated within the orifice of the os tincæ, has been noticed in a former number of the *Medical Times*.

REAL AND APPARENT DEATH.

M. Legrand proposes applying the reflecting powers of the eye to the solution of the sometimes difficult question, whether death is real or apparent.

When the flame of a candle is placed before a healthy eye in the living subject, three distinct images are produced. These images exist for a short time after death, but soon become confused; and, in proportion as the fluids of the eye evaporate, the reflecting powers of the organ are modified, until, at length, they cease altogether. Thus, the third image disappears almost immediately after death from loss of clearness in the lens; and the second image also disappears from gradual change of the cornea. Lastly, as the cornea becomes more opaque, and the sclerotic altered in form, the third image also ceases to appear, when the certainty of death may be inferred. MM. Majendie, Andral, and Lallemand are commissioned to examine how far this new sign may be relied on.

SCOTLAND.

[Edinburgh Correspondence.]

The Lectures in both departments of the Edinburgh Medical School have just terminated. In many respects, and, in particular, as to the number of students, this has been the most successful session for several years past. All the Institutions connected with Medical Education have prospered. As a Medical School, Edinburgh has the singular fortune, that those are her best friends who exhaust themselves in abuse of her:—

——— honestas laudatur et alget.

She thrives, not by praise, but by persecution; and of this she has had her own share of late years. Over a great part of the world there is a quick reaction in her favour, after a few good hearty rounds of abuse. It were idle to waste time in inquiring why this should be; but, at least, it indicates, that there is no rottenness at the core. It is a great disadvantage for a Medical School to be composed of very young men; but yet a free infusion of young blood, at short intervals, is of much benefit. The value of the compound exceeds the sum of the two elements. The Edinburgh Medical School is composed, at present, in due proportion, of the discretion of mature age and of the activity of youth. But another element of prosperity, besides youth, has been infused, of late, into the Edinburgh Medical School, namely, English blood. We have always had, in Edinburgh, some medical practitioners, and even one or two extra Academical Lecturers, of English birth; but, till the late appointment of Dr. Bennett to the Chair of the Institutes of Medicine, we believe we have had no English Medical Professor. It is alike honourable to the electors and to Dr. Bennett himself, that he owes his connexion with Edinburgh solely to having been a distinguished student and graduate of the University. The same body of electors, ten years before, had so far overcome their Scotch prepossessions as to appoint Mr. Kelland, not merely an Englishman, but an Englishman in priest's orders of the Church of England, to the Chair of Mathematics. Mr. Piazzi Smith, the Professor of Astronomy, is also an Englishman. Thus, in the University of Edinburgh, at present, out of every eleven Professors, one is an Englishman. On many accounts, this is a subject for congratulation, as is the fact ascertained by the Parliamentary Census, that there are now more Englishmen in Scotland, in proportion to the population of Scotland, than there are Scotsmen in England in proportion to the population of England. And yet, notwithstanding the number of young Englishmen who resort to the University of Edinburgh and other Scotch educational institutions, there is reason to believe that the number of Scotch students at English seminaries is nearly on an absolute equality. The resort of Englishmen to Scotland for profitable employment is a sure sign of the growing prosperity of Scotland. Also a more kindly feeling begins to prevail between the two nations. The old sarcasms which kindled fierce hostility have passed into merry jests. A Scotsman no longer feels it necessary to be angry if an Englishman asks, "Why is Scotland so destitute of crees?" but answers, if he can, "because every Scotsman cuts his stick as fast as he is able." We should be equally glad to welcome the Irish among us, but that the facilities of steam navigation have made us best acquainted with that part of the Irish population who leave filth, vermin, and fever in their trail. As a proof, however, that the patrons of our University are liberal enough to appreciate Irish talent, it should not be forgotten that in the canvass for the Chair of Midwifery in 1840, Dr. Kennedy, of Dublin, had but one vote less than Dr. Simpson, on whom the election fell.

We begin now to look forward to the meeting of the British Association, which is to take place at Edinburgh this year, in the beginning of August. The Medical section of the Association has been abolished for several years past; we believe, however, that it has been in contemplation to revive that section at the Edinburgh meeting, in compliment to the Medical School. But another view may be taken—a Medical section is less required at Edinburgh than at most other places where the Association has met, since here, as in London, there are opportunities all the year round for the reading of Medical papers—while it is desirable that our Medical men, who being immersed in medicine and their active duties during the rest of the year, should have leisure to pick up a little general scientific knowledge by attendance on the meetings of the other sections. On the whole, the feeling in the Medical Profession here is, that a Medical section at Edinburgh, rather than elsewhere, would be *de trop*.

The Medical Profession are looking, at present, with considerable interest to the proceedings of Parliament in certain Scotch matters. Two Bills have been introduced recently with a view to sanitary improvement; namely, the Health of Towns Bill for Scotland and the General Police Bill. Many of the provisions of both these Bills are highly conducive to the object in view, and meet with general approbation from our Medical brethren. But most of us still retain our objections to the sanitary arrangements for Scotland being put under the control of the Central Board in London, not less on account of their necessary ignorance of the pecu-

iar habits and circumstances of the people of Scotland in the minute points of domestic life, as from what we know of the heterodox medical opinions already instilled with effect into the simple ears of a Board which has a patron of Mesmerism for its head. No doubt a separate Board for Scotland would create additional cost, were it framed on the model of the English Board; but, with a small outlay, a sufficient superintendence might be grafted on the local institutions of Scotland, which would work more in conformity with the feelings of the public than any new machinery. In the arrangement of sanitary measures every unnecessary source of popular irritation should be carefully avoided, and every possible precaution taken to secure the co-operation of the philanthropic part of the community in each district. If there be neglect on these heads, there will be no influence prepared to balance the Alderman Lawrences who abound in every part of the country, and who will find it no difficult task, in the absence of efficient opposition, to thwart all the proposed sanitary measures by the simple expedient of continually exaggerating the views which the pocket so naturally takes of a question. Just fancy what an advantage will be thrown on the side of such agitators of the whole Medical Profession in Scotland, at the crude absurdities sure to be advanced in every manifesto issued by the Central Board of Health, so long as its Medical opinions are derived from their present source.

IRELAND.

[Dublin Correspondence.]

IRISH MEDICINE IN AMERICA.

The flattering reception given to two Dublin works lately in America,—one an entirely new treatise by Dr. Churchill, just published in Philadelphia, the other the well-known treatise of Robert Smith, on "Fractures of the Joints,"—deserves a passing word of notice. Publishers, I believe, have every reason to find fault with Cousin Jonathan for not "working on his own hook." An entirely new work written in Dublin, and published for the first time at the other side of the Atlantic, is, however, a novelty. The volume completes, we are told, the valuable series of works comprising Midwifery and Diseases of Women and Children, by Dr. Churchill, already favourably known in America, and owes its existence to the solicitations of his publishers in that country. Of some 600 or 700 pages, the work is divided into two parts; the first devoted to the management of the infant at birth, food, cleanliness, air, and exercise; the second to the various diseases of children, arranged under the heads of diseases of the cerebro-spinal system, the respiratory system, skin, eruptive fevers—infantile remittent, worm fever, and gastric fever. In the first part of the work we find some interesting facts. Speaking of the degree of mortality of infants, it is stated that in the principal cities of Europe the mean proportion of still-born children is one in every twenty-two births, and the number is three times greater among illegitimate than among legitimate children. Of all children born alive, one-tenth die within a month; a mortality equal to that between seven and twenty-four years. At five years, however, one half of the children born alive have died. From the report of the Registrar-General, one-third of the total deaths in England and Wales occur under two years of age, and in a visit to St. Kilda Mr. Maclean states that the fearful number of eight out of every ten children were swept away, mainly owing to the "filth in which they live, and the noxious effluvia of their houses." With these data before him, Churchill argues very properly that an infinity is yet to be accomplished in the bringing up of children. Without referring to the frightful mortality of the Rotunda Lying-in Hospital at one time, before the present organized system of ventilation was introduced into it, the fact stated by Combe may, perhaps, also be alluded to. "About a century ago," he says, "the workhouses in London presented the astounding result of twenty-three deaths in every twenty-four children under the age of one year." An improved system of management was adopted in consequence of a Parliamentary inquiry, and from 2600 deaths the number fell to 450 a-year. What may yet be done, *malgre* the hard sayings of Mr. Carlyle, is a subject of deep and increasing interest. Some excellent remarks on Air and Exercise follow, intended for the educated and professional reader. Indeed, it is a subject of gratification to find that Dr. Churchill does not sanction that popularising of medicine which does so much mischief. No rendering of big words into the vernacular; no rules for mothers as to the most orthodox fashion of making up doses for their darling little treasures, &c.

Among the diseases incidental to children he looks on croup and trismus nascentium as about the most dangerous. Of the latter, Dr. Collins says, "A more intractable disease does not come within our observation." He has never seen an instance "where the child seemed even temporarily relieved by the measures adopted." In the chapter on croup much stress is laid on its great liability to relapse. Julien and Albers have known it occur seven and nine times, and Churchill as often as three and four. The other diseases of the respiratory organs are all treated of *in extenso*, and the experience of our Author in the several Dublin hospitals brought to clear up several points. On the whole, indeed, the work is not a little creditable to the experience and ability of Dr. Churchill, and, in its clear perspicuous style, must command many readers. We are selfish enough, too, to hope that it is the beginning of a new era, when talent at this side of the Atlantic will be recognised at the opposite one, and—that most loveable of all practices—*paid for*. It is quite delightful, indeed, to find all our old names, Carpenter, Maclise, Stanley, De Jongh, nay, that fine old herbarian, Anthony Todd Thompson himself, issuing from the publishing houses "as good as new," in the Pater noster-rows of America, not to mention a host of others "familiar as household words." But we must not forget Robert Smith. Nothing if not pathological—it is, of course, on fracture of the bones he treats—his opinions in fracture of the cervix femoris are founded on a study of not less than 140 cases of this injury.

FRACTURES.

After giving succinctly the usual diagnostic symptoms and signs, he says the majority of the symptoms of fracture may be present in cases in which the neck of the femur *is uninjured;* and, on the other hand, the fracture may be unaccompanied by the more important of the usual diagnostic signs. On the much-mooted question of shortening of the limb, in extra or intra-capsular fracture, after much discussion of the subject, he says, the degree of shortening is greater when the lesion is external than when it is within the capsular ligament. The shortening within the capsule he estimates at from a quarter of an inch to an inch: the degree of shortening, of course, varies with the direction of the fracture and relative position of the fragments and amount of laceration suffered by the fibrous covering of the neck of the bone; nay, the nature of the fracture may be such that there will be no displacement at all,—a condition that should prevent the surgeon from deciding too hastily that no fracture exists, simply because there is no shortening of the limb. Another circumstance which obviously prevents shortening, is the capsule itself remaining untorn, especially the bands mentioned by Weitbrecht, the "cervical ligament of the femur." Nay, if, as sometimes happens, this so-called ligament remain intact, it will produce perfect apposition, under certain circumstances, and a medium for the transmission of nutritious matter, since blood-vessels ramify in this membrane; and the "reserve power" of Mr. Pagett, which dwells latent in every tissue, for purposes of separation, will be exerted in the enlargement and, probably, multiplication of vessels.

Instances of non-separation of the two portions of bone have also been cited. Of course, they are very rare, but lead to the very practical hint, where everything else determines the nature of the accident, not to use too much force in eliciting crepitus. It has been seen in America and England. In a case at St. Bartholomew's, the man was put to bed, under the impression that no fracture existed. He died, in five weeks, of another complaint, and, on opening the hip-joint, a fracture was discovered, but the broken surfaces were quite in contact, and the synovial and fibrous membrane uninjured. The strong, unyielding nature of the capsular ligament, also, in intra-capsular fractures, limits the shortening. Here, however, it need scarcely be said, the opinion of the indefatigable pathologist of the Richmond and Sir Astley do not agree. The former adduces the testimony of fifteen cases, in which the lengthening in *extra*-capsular fractures was greater than in the intra-capsular accident; and Smith believes, that Sir Astley entirely overlooked the influence of the circumstance of the fracture being impacted in shortening the limb, by preventing muscular action. All extra-capsular fractures, Smith thinks, are, in the first instance, impacted, and necessarily accompanied by a fracture traversing some portion of the trochanteric region. This interesting fact has been the result of the unwearied assiduity of the great leader of the Pathological School of Dublin,—having, he says, omitted no opportunity of investigating the point, in upwards of a hundred specimens of extra-capsular fracture, and found, without a single exception, a second fracture traversing some portion of the inter-trochanteric space running from the trochanter-major to the trochanter-minor,—its concavity, the posterior intertrochanteric ridge. Sometimes it is a mere fissure, but is evidently the result of the forcible impaction of the broken cervix into the shaft of the femur. The mechanism of the matter is, indeed, quite clear.

As to the period at which shortening takes place Smith is also very clear; it may show itself at once and very considerably. In such cases, the injury will be found to be a comminuted fracture *external* to the capsule. In other cases the shortening, in consequence of the paralysed condition of the muscles from contusion, is not evident for some days; and in a third class of instances, after the expiration of some weeks or months, it begins to show itself, evidently the result of absorption of the neck of the bone. Every practitioner must recall to his memory cases of each of these characters. Other instances have been added by Smith, where there is, perhaps, little inequality at first; but at the end of some time, from some unusual turn, a considerable retraction takes place all of a sudden; this arises, he thinks, from the giving way of the "cervical ligament," spoken of before. Something of the kind may also arise where one fragment, as it were, rides on the other. The valuable and curious practical point, arising as a matter of diagnosis in these injuries, that the *sudden* occurrence of shortening is diagnostic of fracture within the capsular ligament, more especially when united with crepitus,—by the primary shortening not exceeding an inch,—complete loss of power of course,—the foot not inverted, &c. Extra capsular fracture, on the contrary, being known, in its *non*-impacted state, by more shortening—eversion of foot—but the comparative ease with which the limb may be restored to its natural length—pain and ecchymosis more than in the intra-capsular variety—and crepitus. In the impacted fracture this last is absent; there is but slight shortening or eversion,—extension has no effect,—the accident has occurred from a very severe injury, and in a person less advanced in life than the former.

IDENTITY OF MALIC AND SORBIC ACIDS.

Mr. Donovan has recently read a paper at the Academy as to the identity of malic and sorbic acids, which has been referred to a Committee for consideration and publication.

RESIGNATION OF DR. BARKER.

At the last meeting of the College of Physicians, an address was presented to the much respected Professor of Chemistry in the School of Physic, so well known to the *habitues* of Park-street. The duties attached to the Chair, it need scarcely be said, included not alone the prælections on Chemistry, for which Dr. Barker was so justly celebrated, but also the professorship of Clinical Medicine at Patrick Dun's, from which he retires full of years and respect. Dr. Barker, in connexion with Dr. Cheyne, edited an able work on the "Epidemic Diseases of Ireland;" but the treatise by which he is best known is a "Translation of the Latin Pharmacopœia," such a bore to our juvenile Æsculapians. In addition to these, in the words of the address, Dr. Barker has had other claims on the respect and gratitude of the Profession in Ireland, "the majority of which have been his

pupils, and have had many opportunities of observing his unvarying exercise of the social virtues, unbending integrity, delicate sense of honour, and anxious care for the interests of his professional brethren." The address is signed by the President, William Stokes, ever first in the work of kindliness and professional advancement in Ireland.

THE MEDICAL CHARITIES BILL

Has met with no little opposition already. The North Union Guardians, Dr. Brady alone dissenting, have passed a resolution condemnatory of its provisions, as oppressive to the rate-payers. In Clare, on the contrary, at a large meeting of the Profession in that county, a resolution expressing the strongest approval of it was passed, and the best thanks of the meeting voted to Sir William Somerville for introducing the measure, while in Dublin the opposition given to it in the house has fallen like a thunder-clap among our Board of Health friends. From any changes, it is to be hoped none of the present Dublin Hospitals will suffer—of such immense value to the Irish School of Physic—this must be kept steadily in view. The compliment paid the Profession in the House, we feel they deserve; and, in Committee, it is to be hoped a good measure will, at length, be fashioned out of even the present opposing materials.

SELECTIONS FROM FOREIGN JOURNALS.

THE VENEREAL DISEASE AMONGST HORSES.

The Italian journals bring an account of several cases of supposed syphilis which have recently occurred in the Lombardo-Venetian States. They are fully described in the *Lombard Medical Gazette* by M. Balardini, of Milan.

The disease, it would seem, had prevailed for some time previously in Austria, and thence imported into the provinces of Trevise and Udine. A Veterinary Committee was at once appointed to examine the animals. Five infected mares were found in the province of Brescia, and isolated; the disease then seemed to disappear, but many other cases were discovered soon afterwards; and it was ascertained that they had been occasioned by a stallion brought from Cremona.

The disease consisted in the presence of ulcers on the labia, occasionally followed by true buboes and œdematous swelling, which sometimes extended to the mammæ or hams. An antiphlogistic treatment was employed, but in all cases where bubo existed, it became necessary to employ mercury and iodine, under the use of which the symptoms rapidly disappeared. The period of treatment varied from forty to fifty days, and the cure was radical.

CAN GONORRHŒA PRODUCE SYPHILIS?

Although this question be simply one of fact, it has never received a satisfactory solution. Hunter, as every one knows, believed in the identity of the two poisons. Most surgeons of the present day hold a contrary opinion, yet many others assert that examples of gonorrhœal syphilis are frequently observed by them.

The Medical Society of Lyons has resolved on putting the question to the test of experience. If cases of secondary syphilis from gonorrhœa be so plentiful, there can be no difficulty in collecting them. A medal of 300 francs' value is, therefore, offered to any surgeon who will forward to the Society the history of ten cases of constitutional syphilis arising from gonorrhœa. The addresses of the patients must be given, and permission to examine them by a Committee obtained. This is a business-like way of settling the matter.

INFLUENCE OF PREGNANCY ON PHTHISIS.

An opinion has prevailed for a considerable number of years, that the progress of phthisis is delayed, or even temporarily arrested by the state of pregnancy. This opinion, which was combated by Andral in the first edition of the *Clinique Médicale*, was partially admitted in the subsequent editions. In the second edition of Louis's work on "Phthisis," a single case seemed to support Andral's first opinion; and two observations lately published by MM. Hervieux and Robert, tend in the same direction. M. Grisolle has lately examined this question by the aid of more numerous facts than any of his predecessors could command. In 27 cases, phthisis appeared to commence during pregnancy in 24; to precede pregnancy in 3. In all the cases the disease advanced as rapidly as in non-pregnant women. From these facts Grisolle infers, that in the majority of cases in which pregnancy and phthisis co-exist, the latter condition supervenes on the former; that there is no antagonism between the two conditions; but that pregnancy exerts no suspending effect whatever on the course of phthisis. "The phenomena of tuberculization, whether local or general, are developed in the same order, with the same regularity and the same constancy, in females becoming phthisical during pregnancy, as in those under ordinary conditions." Pregnancy does not appear, on the other hand, to increase the dyspnœa, or the hæmoptysis, or the other symptoms which, it might have been supposed, would have been affected; yet in 13 cases in which the duration of the disease could be determined, it appeared to be shortened, the mean duration being only 9½ months. If anything, therefore, pregnancy appeared to accelerate, instead of suspending, the progress of phthisis. After arriving at this conclusion, Grisolle inquires whether, after delivery, a sudden and rapid increase in the rate of progress of phthisis is common, as has been stated. He answers this question also in the negative. In 12 females, in whom, at the period of delivery, phthisis had arrived at its last stages, death did not occur under an average of four months subsequently, and in all the cases the disease pursued a course quite similar to that before delivery.

Grisolle then inquires, whether phthisis exerts any modifying effect on the progress of pregnancy. After stating, that phthisical women conceive less readily than others, and that it is incontestable that they have less often favourable times than other women, he yet remarks, that the tendency to abortion, in phthisical persons, is not so great as has been supposed. Thus, in 22 cases, which were sufficiently observed, 3 aborted between the fourth and sixth month, 3 had premature births at the eighth month; in the rest, pregnancy was, in all respects, natural. In this respect, there exists a considerable difference between phthisis and pneumonia; for, in his "Traité de la Pneumonie," Grisolle has recorded cases to prove that, in a very considerable number of cases, pneumonia, occurring in pregnant women, produces abortion.

The conclusions arrived at in the memoir may be thus shortly stated:—First of all, it is uncommon to find conception occurring in women with confirmed phthisis; secondly, in women disposed to phthisis, pregnancy seems to be a determining cause, and to lead on to the manifestation of the disease; thirdly, the disease thus called forth is not in the least delayed by the state of pregnancy, but is even slightly more rapid in its course than usual; fourthly, the phthisical disease, coming on during pregnancy, exercises little influence on this condition.—*Archiv. Générales*, Jan., 1850.

ON THE POISONOUS GASES OF VAULTS AND CEMETERIES.

A recent number of the *Annales d'Hygiène* contains some interesting information on this subject, which acquires additional importance from the state of the grave-yard question in England.

It had been long remarked by persons employed about the Parisian cemeteries, that a very pernicious gas was generated in the temporary vaults in which bodies were deposited, and M. Pellieux was requested by the Inspector of Cemeteries to investigate the nature of this gas, and discover, if possible, the means of counteracting its deleterious influence. One vault in Montmartre was particularly mentioned as insalubrious to the workmen, and was examined with care. It was eighteen feet deep, and contained eleven places for coffins on each side; those enclosing bodies being hermetically walled up. On descending into the vault, nothing but a cadaveric smell was perceived; yet a candle was immediately extinguished, though the vault had been left open for twenty-four hours previously. A bird let down to the bottom of the vault was killed in a few seconds. The Inspector and M. Pellieux now made an attempt to enter the vault, but were unable to do so. One of the workmen, long accustomed to such employment, with great difficulty, collected enough of the gas to fill a quart balloon.

The symptoms produced by exposure to the emanations are generally as follows:—The respiration first becomes difficult and oppressed; the head heavy and the face injected. A peculiar feeling of dryness is now experienced in the mouth, and deglutition becomes difficult. An acrid, warm taste, which the grave-diggers compare to that of bad brown sugar, is felt in the mouth: in a word, the symptoms of asphyxia are prominent.

The effects of the gas were found to be produced in many other vaults which were examined; and, what is curious, were particularly violent in a vault of the 30th series, although it was quite new, and had never received a corpse.

The gas collected from the vaults of the cemetery of Montmartre, Pere-la-chaise, and Mont Parnasse was examined chemically by M. Pellieux, and found to consist almost entirely of carbonic acid gas. In many of the vaults, however, a very notable quantity of carbonate and hydrosulphate of ammonia was discovered. M. Pellieux is inclined to think, that other gases, likewise, will be found, and proposes to submit to a regular chemical analysis, not only the emanations from the vaults, but also the air of the various cemeteries. As to the cause of these emanations, the Author considers that they may be attributed to three principal sources:—

1. The decomposition of animal matter gives rise, as is well known, to a considerable quantity of carbonic acid gas. The quantity of the latter contained in a vault will not be in proportion to the number of bodies contained, but rather to the rapidity of decomposition.

2. In the temporary and pauper graves the mass of dead bodies in permanent decomposition is a constant source of carbonic acid gas. Hence, under certain states of the atmosphere, this gas may perhaps flow down into the vaults, just as a fluid would do.

3. In addition to the above general causes, there is a special one which refers to some of the vaults examined. These had been excavated in ground which had served for pauper graves (*fosses communes*) many years ago. In ground of this kind, decomposition does not go on rapidly, and the Author affirms that he has had occasion to see bodies buried in such ground as little decayed as if they had been buried for a few months only, though the date of sepulture went back to twenty years.

With respect to the means of counteracting the effects of the noxious gases contained in vaults, the Author proposes adding a double chimney to each for the purposes of ventilation; but the Board of Health long ago recommended a more simple process, viz., pumping in atmospheric air with a common fire engine.

From the above analysis it will be seen, that M. Pellieux treats this important question exclusively as a chemist. Every one is acquainted with the deleterious influence of carbonic acid gas, but there is no doubt that other gases or volatile substances are produced during decomposition of animal substances, and play a very important part in the production of disease. This fact was pointed out many years ago by Mr. G. A. Walker, who had no opportunity, however, of detecting the precise chemical nature of the volatile substances alluded to.

M. Gaultier de Claubry also alludes to the probable agency of these emanations, in a note attached to the memoir of M. Pellieux. M. Gaultier notices, that the Author has taken only one view of the subject, and engages him to give a wider range to his experiments. Although it may be difficult to discover the precise nature of the poisonous exhalation, much benefit must arise from a scientific examination. It is, at all events, certain, that the development of carbonic acid gas, which explains cases of asphyxia and sudden death in vaults, will not account for many other important phenomena connected with emanations from decaying animal matter. The peculiar acrid and sugary taste mentioned by the workmen, does not arise from carbonic acid gas; nor is it from this gas that the exhalations from stagnant waters become so injurious to health. The insalubrity of crowded wards in hospitals, gaols, &c., is likewise well known, yet the propor-

tion of carbonic acid gas is there increased by a very insignificant fraction only. This was pointed out long ago by a Commission which the French Government had named to ascertain the number of cubic feet of atmospheric air necessary for each individual in barracks and military hospitals. The Commission showed, that the air of apartments became insalubrious long before chemistry was able to detect any sensible change in the quantity of carbonic acid gas.

In the Report of the General Board of Health on Extramural Interment, we find some observations of Dr. Lewis on the gases of coffins. In all cases, Dr. Lewis found that the gases extinguished flame, and were themselves incombustible. They consisted apparently of nitrogen and carbonic acid, "holding putrescent animal matter in suspension." Occasionally ammonia was present.

LOSS OF HEAT IN CHOLERA.

The following results have been recorded by M. Roger, from experiments made on 22 cholera patients. The refrigeration was common to all parts of the body, but varied in degree. It was least marked in the axillæ, more so in the mouth, most so at the extremities. In 6 cases the thermometer placed in the axilla marked 96·8° (Fah.); in 2 it fell to 94°; in 1 to 93°; and in 1 to 91°. In other cases, although the face and hands were excessively cold, the chest and axillæ preserved their natural temperature. In all cases the temperature was lower in the mouth than in the axillæ by from 7 to 14° (Fah.) Held in the hand the thermometer was only 12 times higher than 86°; in three cases it marked only 77°, and in one it actually sank to 69·8°, which was four or five degrees below the temperature of the surrounding atmosphere. The fact of a general and considerable diminution of temperature is then incontestable. As to the alleged development of heat, some hours after death from cholera, M. Roger regards it as purely fabulous.—*Archiv. Génér.* Jan. 1850, p. 111.

TRANSMISSION OF CHOLERA.

An important statement respecting the number of houses and persons attacked with cholera in Breslau is given by Goppert in Casper "Repertone." Of 4,166 houses, 747 only furnished one or more cases of cholera in the following proportions:—In 482 houses there was in each only a single case; in 150 houses there where 2 cases in each; in 48 houses 3 cases in each; in 28, 4; in 12, 5; in 10, 6; in 6, 7; in 3, 8; in 2, 9; in 1, 12; in 1, 13; in 1, 16; and in 1, 17. These facts are opposed to the hypothesis of contagion; yet it would have been as well if the average population of each series of houses had been given.—*L'Un. Méd., Mars.*

MANGANESE IN CHLOROSIS.

La Presse Médicale (Brusselles) contains some papers, by M. Hannon, concerning the employment of manganese in chlorosis, a mode of treatment which we have already brought to the notice of the readers of the *Medical Times*. M. Hannon's views respecting chlorosis are, apparently, based on observation; yet, until they have been confirmed by other observers, they appear very doubtful. According to this observer, manganese is a normal ingredient of blood, and, by its deficiency, produces a form of chlorosis, which is essentially distinct from that consequent on the diminution of iron, although it may be combined with this. In chlorosis, from want of iron, the predominant symptoms are an earthy colour of the skin, the enfeebled locomotive power, the slow regular pulse, diarrhœa, and abnormal fluidity of the menstrual blood. In chlorosis, from want of manganese, the colour of the skin is normal; there are pains in the organs of locomotion, amennorrhœa, and constipation. A simultaneous deficiency in the two metals produces a pallid, earthy tint, a bluish tint of the sclerotica, œdema, nervous disorders, great perturbation of the circulation, dyspnœa, lowering of the animal heat, and uterine affections. In the treatment of the affections thus characterised, iron, or manganese, or both, are directed to be employed. The sulphate of manganese may be employed, in doses of from half a grain to a grain, three times daily. Sulphate of iron, in the same doses, may be combined with it.—*La Presse Méd., Mars* 3—10.

IODINE IN FRESH-WATER PLANTS.

The improvements of modern chemistry have thrown no inconsiderable light on therapeutics, by showing that many of our old and best popular remedies owe their value to certain substanees, the action of which, in a simple state, is well determined. Thus it has long since been shown that the active properties of burned sponge are due to the iodine which it contains, and it seems probable that many other remedies of a similar kind derive their efficacy from the presence of the same substance in them.

Mr. Lindlay, I believe, was the first who pointed out the existence of iodine in water-cresses. A French botanist, M. Chatin, has confirmed this fact, and, moreover, shown that iodine, in greater or lesser quantity, forms an element of all fresh-water plants. M. Chatin has likewise ascertained,

1. That plants growing in running streams, or in water agitated by the winds, contain more iodine than those which inhabit stagnant waters.

2. That the proportion of iodine is very small in those plants which are imperfectly, or for a short time, submerged.

3. The proportion of iodine in fresh-water plants does not appear to depend on the nature of the plant itself, or on the place it occupies, in the natural order of vegetable bodies.

From the quantity of iodine contained in water-cresses, the Author concludes that the popular idea of their usefulness in cases of phthisis, scrofula, &c., is well founded. The plant which grows in running streams has ever been more esteemed than those which are produced in marshy situations; and here, again, the popular notion is confirmed by chemical research. Conium, also, is a plant which contains a considerable proportion of iodine, and its anti-scrofulous properties have been extolled by physicians of the old and modern school. Amongst the latter may be named M. Trousseau, who considers it a remedy little inferior to the cod-liver oil in scrofula.

ON THE PRODUCTION OF SUGAR IN THE LIVING BODY.

By M. BERNARD.

In the vegetable kingdom, sugar is evidently formed by the organs of the plant. Does the same occur in the animal kingdom, or is the sugar found in the living body derived from the amylaceous and saccharine matters contained in their food? Such is the interesting question which M. Bernard, the discoverer of the function of the pancreas, endeavours to solve, in a memoir an analysis of which we now present to our readers.

As the food which animals take often contains more or less saccharine matter, it was natural to consider, that the sugar found in their blood or fluids was solely derived from this source, and such is the prevailing opinion at the present day. This idea was, moreover, confirmed by the theory, that animals are incapable of creating any immediate principle, but merely destroy those which are furnished to them by the vegetable kingdom. Hence the power of generating sugar has been said not to exist in animals, who are supposed to be capable of destroying that principle, and nothing more. Experiment and physiology overthrow this doctrine.

The first series of experiments performed by M. Bernard relate to the conditions necessary for the formation of sugar. Animals were fed on substances containing the sugar, or a substance capable of being transformed into sugar; and this latter principle was accordingly found in the blood soon after the meal. But it was necessary to push the inquiry further. Other animals were, therefore, fed on flesh, or left fasting for a long time. They were then killed, and their blood equally contained sugar. This important fact once determined, it became necessary to ascertain whence was derived the sugar found in animals which had not taken a particle of saccharine or amylaceous food. The sugar, though found in the blood of the heart, was not, probably, fabricated in that organ? Where, then, was it made? A glandular apparatus of the abdomen was the most probable source, and, after various unsuccessful attempts, which need not be noticed here, M. Bernard adopted the following method:—

A dog was fed on flesh and then stunned seven hours afterwards. Some blood was collected from the vena porta, some chyle from the thoracic duct, some blood from the heart, and, finally, some of the matters contained in the stomach and intestines; all these were carefully tested for sugar. It was found in some quantity in the blood of the heart; in much greater quantity in the blood of the vena porta. Not a trace could be discovered in the matters taken from the stomach and bowels.

These experiments, frequently repeated, always gave the same results, and the Author was evidently on the track of his discovery. Whence comes the sugar in the vena porta, was the next point to be ascertained. A dog fed on flesh was rapidly killed, and all the veins coming from the principal organs of the abdomen, were quickly tied. No sugar could be found in the blood of the intestinal, gastric, pancreatic, or splenic veins; while the hepatic veins, on the contrary, contained large quantities. The tissue of the liver was now analysed, and sugar found in it: the tissues of the other organs contained none.

The question was thus solved. The liver manufactures sugar. But it may be asked, How came it that sugar was found in the hepatic veins, since, if made by the liver, it should have been carried forwards towards the heart by the supra-hepatic veins? The answer is simple. When the abdominal cavity is opened, all pressure is removed. The blood returns by reflux into the porta and hepatic veins. On placing a ligature over the porta, at the point where it enters the liver, no sugar is found in its blood, for no reflux then takes place.

It thus follows from the experiments now noticed, that the liver contains a considerable quantity of sugar; that this sugar is dissolved in the blood which traverses the liver, and that it is thence carried by the veins to the heart.

Having clearly established this important proposition, M. Bernard proceeds to describe at great length the various processes which he employed for the purpose of determining the presence of sugar in the liver and blood; but it is unnecessary to enter into these details, which are purely chemical. When a portion of the liver is triturated, then boiled for a few minutes in a small quantity of water, and filtered, we obtain an opaline fluid, having all the characters of a saccharine solution. This latter turns brown when boiled with potass; reduces the tartrate of potass and copper, and ferments on the addition of a leaven, giving off carbonic acid, and the residue, when distilled, furnishes alcohol. M. Bernard has never been able to obtain the sugar in a crystallized state, on account of the great quantity of salts contained in the tissue of the liver. He thinks himself justified, however, in affirming, that it is not cane sugar, nor the sugar of milk, nor glucose, but the same principle as the sugar of diabetes.

Lastly, it may be asked, whence is derived the sugar contained in the liver? Here two suppositions are admissible. Either the sugar is formed by transformation of certain elements of the liver, or it arises from antecedent alimentation. The latter hypothesis is not adopted by M. Bernard. Sugar was found in the blood of dogs which had been fed on flesh for nineteen days. Again, section of the pneumogastric nerves suspends the formation of sugar in the liver, even in animals fed on carrots, &c. Its presence in that organ has been demonstrated at the fourth and fifth month of intra-uterine life.

CONCLUSIONS.

These may be given in M. Bernard's words:—

"Diabetic sugar exists normally and constantly in the blood of the heart, and in the liver of man and animals.

"This sugar is formed in the liver, and is not derived from saccharine or amylaceous nutriment.

"Its formation commences during intra-uterine life, and, consequently, before the ingestion of any food.

"The secretion of this saccharine matter appears to be connected with the pneumogastric nerves." The preceding facts overthrow, in the clearest manner, the generally admitted law, that animals are incapable of producing any immediate principle. We here see, that animals, like vegetables, can both create and destroy sugar. But the question is far from being exhausted. From what has been said, we are not to conclude that sugar will be found in

the liver of the first subject taken from a dissecting room. Many diseases eliminate it from that organ before death. It is well known that sugar disappears from the urine of diabetic patients some time previous to death. It also disappears from the liver. M. Bernard examined the livers of nineteen subjects, and in several there was no sugar, but his observations are not numerous enough to decide under what circumstances the sugar thus disappears. It is already certain, that lingering disease either diminishes the quantity in a remarkable manner, or removes it altogether.

The different classes of animals may also present differences in a normal state. There is a good deal in the livers of birds and mammalia; while fishes do not contain any sugar. Whence this difference? Perhaps, from the peculiar respiratory phenomena of these animals; for M. Bernard proposes demonstrating, in another memoir, that the energy of these phenomena is intimately connected with the formation of sugar in the liver.

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THE MEDICAL TIMES.

SATURDAY, APRIL 27, 1850.

The Cholera is once more at hand. A voice is now muttering, which, ere long, shall thunder death to many an aching heart. The cloudlet just visible on the horizon may, in a few weeks, darken the whole vault of heaven. It is an unquestionable and appalling fact, that this pestilence is once more abroad, and is ready, on the appearance of the necessary state of the atmosphere, to renew its fearful and fatal attacks.

From the returns of the Registrar-General we learn, that in the week ending March 2, a boy died *of English* Cholera, after an illness of 17 hours; that in that ending March 16, three persons died of Cholera; that in the week ending March 23, a boy died of infantile Cholera, after an illness of 20 hours. *The latest account* we hear is, that a girl dies from *English* Cholera, in St. Giles's, after an illness of 16 hours; and Mr. Simpson, the registrar, mentions that the medical attendant, before certifying the cause of death, called on him to explain, *that if the late epidemic had prevailed at the present time he would have considered it right to return the case as Asiatic Cholera. Most* practitioners, we believe, will admit that for *English* Cholera, the periods of illness, the season of the year taken into consideration, were somewhat short. This is not so bad as the accounts for the corresponding weeks of the past year; but it testifies to the terrible truth, that the Cholera is lurking in the very heart of London, and that probably we shall, ere long, hear something more of it.

Yet nothing is done; with a full knowledge of all this, men seem asleep. With a clear recollection of the sufferings the visitation of last year entailed on this country; with the picture drawn by the Press of the miseries endured by the poor still before their eyes; with half Bermondsey and Lambeth in mourning, and in spite of the gigantic exertions made by Mr. Simon and a host of others, they calmly see the destroyer approach, slumbering on in lethargy till it is too late to resist or to fly. It appears to be the doom of our race to close our ears till the proper time for making preparation has passed away—

> Whenever yet
> Would man believe, until his dying eye
> Beheld the sun of life and splendour set
> Slowly and sadly down Time's evening sky?

We know perfectly well that a Government Bill is to be brought in to create new burying room for the metropolis, and that Public Health Bills are in progress; but the Government may break up any moment, and these things cannot, in the proposed plan, be got ready in time. All that is really done is, that *leave has been given to bring in a Bill* for preventing intramural interments. We want something more immediate—more manageable.

There is much, nay still more, material for destruction than even last summer offered. London has grown in bulk, and now sprawls its vast carcass over a few more hundreds of acres. The myriads that the tide of emigration bore from our shores, or that death swept away, have been replaced by fresh supplies from the country, and new births in the town. Fresh victims await the coming of that viewless and annihilating hand, which shall conduct them swiftly and surely over those waters whose tide they never can re-cross. The Thames still rolls a foul and fetid stream through the centre of the Metropolis, charged with the twofold office of poisoning and paralysing the very springs of life by its horrible stench, and acting not less fatally, by its waters, on those who have no other source from whence to obtain one of the first necessaries of life. It is well known that there is scarcely any such thing as pure water supplied by any one of those enormous Monopolies, yclept Water Companies; but, bad as is the mess which they dole out, it is like the incorruptible waters of Chittagong, in comparison to those streams of poison which the Thames pours into the reservoirs of Bermondsey, and the ditches of Jacob's Island. There the water *is muddy-coloured, from the sewerage it contains!* It is utter nonsense to tell us, in reply to this, that the Thames water is the only one which will purify itself, and that on a long voyage it becomes quite sweet. Those for whom we plead are not going on a long voyage, except it be to the other world, and they have no means of purifying their horrible beverage.

Nor is the air less polluted than the water. The ever-swelling number of chimneys, both on land and water, pours forth each year a thicker cloud of smoke, wrapping our streets in one miserable pall, through which pure air can never pass. The bone-boilings of Lambeth, the tan-yards of Bermondsey, the slaughter-houses of Whitechapel, and the reeking filth of Smithfield, still work with dire effect. Intramural interments, the stronghold of pestilence, are not yet stopped, although acknowledged to be a disgrace to humanity. Putrefying bodies are still rammed into the ground to rot in the close vicinity of those who must, in the natural course of things, one day lie side by side with them. It is, perhaps, instinct which makes the Londoner keep his doors and windows so close—a practice which has often excited the astonishment of those accustomed to the free ventilation of the country. He knows that, foul as is the air within, that which comes from without is, of the two, the more injurious.

One Act, one Bill, should amend the whole; but this we dare not hope. That the Government, if not urged on by an irresistible expression of opinion from the citizens, will do anything towards remedying this state of matters we do not, for one instant, believe. We have, as yet, seen but too few instances of a disposition to admit of no medium between the fulfilment of their duty and resignation of office. In vain do we look among them for the patriotism of a Napoleon, a Nelson, or a Wellington, who would rather have perished than ruled on the condition of sacrificing those interests they considered themselves entrusted with.

> Aide toi et le ciel t'aidera,

must be our maxim, and every engine should be set at work to prepare for, and ward off, the ravages of the cholera. Those who have most to hope for from its coming, to whom it can only bring emolument, should, for the sake of humanity, be the most active in taking means to prevent the outbreak, and thus shame others into movement. We speak in the name of those who have no friend but in the philanthropist, the medical man, or the Liberal Press; who have no other hope or chance of escape or defence. The rich may fly to the country or the sea-coast; the poor must stay and be mowed down, or perish of hunger by the road-side, like the ill-fated serfs of Russia. Means should be organised to grapple with the disease before it breaks out. Now is the moment to begin the work. A properly constituted Board of Health ought to be commissioned; and men of science, physicians and surgeons of eminence, invited to give their opinions as to the best method of relieving and preventing the ravages of the disease. The Board should be armed with the powers of search, for the purpose of arresting and removing everything likely to be seriously prejudicial to the health of the community. From their inspection no place should be exempt; the palace of the noble and the garret of the artizan, the church, the theatre, and the factory, ought to be equally laid open. The sewerage of the towns ought to fertilise fields instead of poisoning human beings; the bone-houses, smoke, slaughter-houses, and similar pests, should be swept away at once and for ever; and then London may assume the rank of a habitable city, and cease to be a mighty sepulchre.

WHAT MUST THE COLLEGE DO?

We have delayed noticing a rumour, to the effect that the Council of the College of Surgeons had resolved to adopt the *laissez faire* system of policy, and to decline recommending to the Government any plan for the better regulation of the Profession, in the hope that the College would see the imprudence and injustice of inaction, and boldly issue their propositions. It appears, however, that they are unwilling to

effect such an alteration in the constitution of their own College as the Profession require, and they have no expectation that any measures they may propose with the view to a compromise of opinions and interests will be accepted; hence they have determined to let matters take their course, regardless of what may be the issue, so that their own vested interests are secured. The Government and the Profession are both treated with disrespect by this neglect; and perhaps the Government will discover, in the reluctance of the Council to propound a plan, an obstinate and irrational clinging to undue privileges, and a sufficient reason to step in and legislate, whether the Council like it or not, upon just and comprehensive principles.

This is the only punishment with which we should desire to visit the sullenness and obduracy of the Council. Their own regret will be sufficient retribution. Though they may be lost to honour, they are alive to their privileges; and the admission of the members to a status of legal equality in the College would be a heavier blow to the Council than their entire deprivation of office and its emoluments. Depend upon it many of them would vacate sooner than submit to the intrusion of the General Practitioners into the mysterious chambers of the College. Some of the Council have expressed this sentiment, and we admire their candour. We should not, however, deplore the loss of their shining talents and important services. They might be spared, without wholly ignoring the *prestige* and dignity of the College. It is not likely even that the oratorical brilliancy of the Hunterian Orations would be impaired. These splendid corruscations of genius, which shoot athwart our literary hemisphere once a year, and illuminate our intellectual darkness with a galaxy of tropes and metaphors, like showers of falling stars on a November night, would be represented, we should hope, by a less ambitious, but a more worthy eloquence. If need were, however, Coleridge has left fragments from which, without much trouble, some future orator might, as well as Mr. President Green, deduce the philosophy of grammar, and concoct an oration quite as unintelligible, only less profound, than the original; and Cicero might supply sentences that the grandiloquent successor of Skey might not blush to copy.

Mr. Guthrie,—he will excuse us for introducing his name, for we act strictly in accordance with the rule of Horace,—

> "Nec deus intersit, nisi dignus vindice nodus inciderit"———

and he modestly believes that he alone—and we are much inclined to think with him—is the man to cut the knot of our difficulties—Mr. Guthrie, then, is excessively indignant that *his* plan has not been adopted by the Council, and menaces a terrible vengeance—nothing less than resignation—because he has not been permitted to play the part of Solon,—an office for which he describes himself as peculiarly fit. We shall not dispute the claim; for a man of his humble pretensions is not likely to place himself hastily in a false position.

With a minority in the Council, strongly disposed to accomplish some change in the constitution of the College, with a Profession clamorous for a removal of the grievances imposed upon them mainly by this Council, and with a Government impatient for an opportunity to legislate with the sanction of all the parties interested, the Council of the College will not be able to rest where they now are. They may desire to delay legislation, and they may succeed, but procrastination will not benefit them; for if their perceptions are not wholly blinded by their prejudices, they must see, that with every succeeding session the General Practitioners have gained strength, and with each renewal of negotiations they have increased their demands, so that the deferring of the day of doom will only accumulate disasters, and bring upon the unjust privileges of the Council a heavier and a wider ruin.

THE DOINGS IN THE PROVINCES.

Had it not been for the ungenerous observations referring to the late meeting of the National Institute, contained in a leading Article in the last number of the *Provincial Journal*, we should not have deemed it necessary to notice the impotent efforts made by the Association, of which this twaddling journal is the organ, to disappoint the just expectations of the General Practitioners of this country. The Editor of this periodical states, in a strain of exultation, that the meeting "*was very scantily attended, and that Mr. Bottomley representing, as he distinctly stated, 3000 (!) members of our Profession, opposed that part of the Report which advocates the establishment of a new College.*"

In the first place, the meeting, according to the most accurate estimate, consisted of upwards of 400 members; and whether this be a "scanty" number or not, we will venture to declare, that it was fourfold larger than the *aggregate* number which the emissaries of the Provincial Association have been able to collect at their *six* meetings.

The quiet way in which it is assumed, upon Mr. Bottomley's sole authority, that that gentleman represented 3000 members, is laughable enough, and not less disingenuous than laughable. It is very true that "he was not *very numerously* supported" in his Amendment, for which only five hands were held up; and considering that the mover represented 3000 provincial Surgeons, it is remarkable that NOT ONE of his supporters was a *provincial* Practitioner. There were upwards of seventy provincial Surgeons at the meeting, and Mr. Bottomley had not, among them all, a *single* supporter! Well might Mr. Bowling inquire of Mr. Bottomley, what had become of his 3000 men in buckram! The Committee of six, sitting at the Freemasons' Tavern, must have had a remarkable faculty of multiplication. "What trick, what device, what starting-hole can'st thou now find out to hide thee from this open and apparent shame?" Every age has its Fastolfe.

In the number of the *Provincial Journal* containing the Article alluded to, there are reports of five Branch Meetings of the Association, and it is worth our while to examine them merely for the purpose of ascertaining the quality of the opposition which this Association is able to present to the efforts of the National Institute. Two of the Meetings were presided over by Fellows of the College, and two by Doctors. The honorary distinctions are not stated in the case of the fifth, although many of the movers and seconders were Fellows of the College. In the case of the Bath meeting, there were no less than six Doctors (!) who took an active part in the proceedings, one of whom was Chairman, and four others movers and seconders of resolutions. The Fellows of the College were in due proportion. The West Somerset Branch, despite the evil influences under which they were convened, showed some glimmerings of common sense. They concluded a resolution by stating, that "in the event of the existing heads of the Profession not consenting to such alterations as would be necessary to carry out these views, it is the opinion of this Branch, that a NEW and SEPARATE incorporation, embodying these principles, should be sought for from the Legislature." This policy is identical with that of the National Institute.

The members of the Bath meeting made no distinct reference to a new College, and in this matter displayed their good sense and taste; but, as might be expected, they were highly favourable to the recent propositions of the Council of the College of Surgeons, only just venturing to suggest a few timorous objections, with a view to give their expressions of opinion a colour of independence.

This is the sort of opposition led by the doughty Mr. Bottomley,—an opposition that is to paralyse the efforts of the Institute and to defeat the aims of the General Practitioners. We hope that the Council of the National Institute will take care to represent to the Home Secretary the fact, that the Memorials and Petitions presented by these Societies do not emanate from the *General Practitioners*, but from a clique of *Doctors* and *Fellows*, whose interests are alien to those of the great body of General Practitioners of this country.

We deeply regret the divisions that exist among the different orders of Medical men, and if the *Provincial Journal* had not, with bad feeling and worse taste, arrayed its motley staff against the surgeons in general practice, and taken advantage of a critical moment to attempt to thwart by false pretences the exertions of the oppressed and repudiated General Practitioners, we should not have offered a word of comment on the feeble and silly agitation which the provincial magnates have been endeavouring to foment. We desire not to set one class against another; but if the Council of the Provincial Association, or their servants, attempt to do so, with the hope of over-riding the General Practitioners, and sacrificing their just interests in order to enhance the influence and privileges of the Pures of both orders, we shall not hesitate to stigmatise such conduct as it merits, and to warn the General Practitioners of the danger with which they are menaced by contributing to support a society *whose power is wielded to effect their ruin.*

Every General Practitioner should immediately *withdraw* from the Association. If he have any respect for himself or his order, he cannot continue to associate with men who merely use him for the advancement of their own interests. The General Practitioners will

never achieve an honourable position until they show their independence, and entirely separate themselves from any associative connexion with men who, by courtesy, and in virtue of their titles, take precedence on all public occasions when the Profession's interests are discussed, and thus misrepresent to the Government the desires and views of the great majority of the Profession. United, the General Practitioners can accomplish whatever they please; but, if they consent to be indoctrinated and misled by their enemies, they will be always a feeble and divided body.

We will conclude these remarks with one word to the Doctors and Fellows who got up these Provincial Meetings,—and let them understand, that we intend no disrespect towards them by designating them by their proper titles.—You have a perfect right to represent your own opinions and interests to the Government, and, in so far as they are just and reasonable, we will support your efforts; but we would advise you, for the future, not to go out of your way to disparage the labours of a class of men with whose feelings and interests you have nothing in common, and to traverse a policy that does not, in the least degree, interfere with the realisation of your own views with respect to the amelioration of the laws governing your respective Colleges. In seeking for an independent College, the General Practitioners do not cross your objects; in common fairness, then, let them pursue their own course, as the best judges of their own affairs.

MEDICAL CHARITIES' BILL FOR IRELAND.

This long-looked-for measure is at length before the House of Commons; and sincerely do we trust it may prove of benefit to our brethren in the sister country. If there is one thing more than another wanted in Ireland, perhaps it is a Bill to secure Medical attendance on the poor, and provide the means of paying for it. In many parts of the country, subscriptions are now impossible; in others, as lately in Cork, grand jurors have set at naught the struggling efforts of the one or two subscribers that adhered to the still smouldering Institutions, while all over the country the greatest antipathy prevails to pay anything in addition to Poor's-rates. Under such circumstances it is quite clear the Government has no alternative.

The present measure will affect every Medical man in Ireland in a public Hospital or Dispensary; and therefore we deem it our duty to call attention to it. A Central Board to organise the new arrangement is amongst the first things contemplated. We would wish this as large and comprehensive as possible, though aware of the old gentlemanly red-tape legend—that two working men are better than two dozen talking men. We would wish it not so much of a sham, too, as at present; for no one is serious in thinking that the two Secretaries for Ireland, who will soon be little kings in their way; and the two Poor-law Commissioners, who are a great deal more than kings, will give one iota of their time to the undertaking. We believe the present Board has won golden opinions from the Medical men of Ireland; it is for this reason we wish to extend the basis of their good services as much as possible.

"Three, nor less than two, Physicians or Surgeons," is a little too explicit for our liking. We can fancy three, and more than two others among the Stokeses, Graveses, Wildes, MacDonnells, Huttons, Jacobs, not to speak of the Corrigans, Cramptons, Kanes, that might constitute the Board,—to which, of course, all matters purely Medical will be referred.

In the appointment of Inspectors, (if such officers are at all necessary,) every one must wish to see active, intelligent men, conversant with the present aspect of science,—familiar, if possible, with the working of Hospitals and Medical Institutions in this country and on the Continent. Names will at once occur to every one. To the independence and knowledge of these men much will be entrusted. One of the Central Board is to be paid, as well, of course, as the Inspectors. Both will be expected to give up their practice, and should be paid accordingly. All salaries of the practitioners in the country are to be arranged by the Board. This we look upon as a provision of the highest importance, and one we should like to see introduced, even into this country. The Board, as we trust, will be purely Medical,—the practice being too common, among jobbing Boards of Guardians, to cut down the Medical man to the lowest farthing,—giving rise—need we say?—to Self-supporting Dispensaries, and such like. The general details of the measure claim our highest approval; and we think the Profession in Ireland have every reason to thank Sir Wm. Somerville for its introduction, as well as the complimentary terms in which it pleased him to speak of that body.

That the contemplated *bouleversement* will please all the medical men in Ireland, we are not Quixotic enough to believe; for we are given to understand that many of the present appointments, especially in the large towns, are gross jobs; and that a man of talent, gifted with all the ability of a Bichât or a Brodie, has not the most shadowy pretence to a medical appointment merely through his qualifications. If he has pounded some noble Lord at a fox hunt, and can lounge on club-house steps, or is an especial favourite of some leading Divines, he may then look up an hospital—not otherwise. We should wish for some *graduation* in the appointments of our Irish Medical Charities, and would sacrifice anything that men of desert should find their proper level. A well-constituted Central Board could do much in this direction. Everything in the way of favouritism should be avoided, by infusing new blood into the old system. The measure will, of course, have gone through the Houses before we are at all awake to its deficiencies. An extensive experiment, however, is about to be tried, and it will not be the fault of the English portion of the Medical Press if its different points and workings be not understood. A short abstract of the Bill was given in our Irish correspondence a week or two since, from which we learn that the local management of the different hospitals and other institutions will be changed. Under the controlling power of the Central Board (if properly constituted) we may expect changes for the better,—of course having respect to the vested rights of the present men, and that no great disturbing change should take place in any of the large hospitals, more especially those of Dublin, such an integral portion of the School of Medicine.

ESTABLISHMENT FOR GENTLEWOMEN DURING ILLNESS.

Whether advantageously to the interests of the Profession or not, self-supporting Institutions are making their way, and the upper classes do not disdain benefits which have hitherto been chiefly confined to the lower. There has been recently established, in Chandos-street, Cavendish-square, an Institution of this kind for gentlewomen during illness; and the large amount of contributions already subscribed proves that it will attain success. With the patronage of Royalty, the active services of the titled and influential, and the benevolence of the rich, it possesses all the elements of continued prosperity. According to the rules, we find that a patient will be required to pay only One Guinea a week for the necessary board and lodging and Medical aid; and there are very few, having the character of gentlewomen, who could not afford this sum. So far the interests of the patients are well cared for; the question is, to what extent, and in what manner, these Institutions influence the permanent interests of the Profession? We think that such establishments, dedicated to the convenience of the higher classes, who, at any rate, can afford to pay to the private Practitioner a reasonable sum for Medical attendance, must be viewed in a different aspect from Institutions of the same nature confined to the relief of the poor, and should be distrusted rather than aided by the Profession.

We have not, however, at present the space to allot to an examination of this subject; but desire particularly to advert to the degradation to which it appears a General Practitioner is willing to submit, in order to secure an appointment in such an Institution. There are two Consulting Physicians—Dr. Watson and Dr. Ferguson; and two Consulting Surgeons—Benjamin Travers, Esq., and Cæsar Hawkins, Esq.; two Physicians in Ordinary—Dr. Bence Jones and Dr. Weber; one Surgeon in Ordinary—William Bowman, Esq.; and one General Practitioner—*Mr.* Hawksley! (*sic.*)

It appears that the individual who drew up the By-laws did not think a General Practitioner deserving of the honorary title of Esquire; and that Mr. Hawksley was content to submit to the degradation implied by the omission; but we hope not without one repentant thought for the honour of his order. Mr. Hawksley may esteem this a trifle, as many men often do thus affect to consider honorary distinctions when weighed against positive advantages; but we assure him and others, that these are matters of great moment, as they affect the vital interests and the *status* of the General Practitioners of this country. Wm. Bowman, Esq., is, by professional rank, no better man than Mr. Hawksley, who, we find, besides being a member of the College, and a Licentiate of the Hall, is a Bachelor of Medi-

cine of the London University. We hope that there are not many men of the temper of Mr. Hawksley in the Profession; and that even he, now that public attention is called to the subject, will endeavour to obtain a restitution of his social rights.

There are other matters in the Rules of the Institution, tending still further to degrade the General Practitioner in public estimation. His duties are made wholly subservient to those of the Physicians and Surgeons, whose foreman he is. As if he were incompetent to form a correct opinion on a case, he is only *permitted* to prescribe on an emergency, and then to make known the change of treatment as early as possible to the Physician or Surgeon in attendance on the case. In other words, when it becomes a question of life or death, and the most consummate judgment and skill are wanted, the General Practitioner *may* prescribe; but for the lackadaisical symptoms of hysterical old maids, he is forbidden to order a single julep. The effect of all this is, that the General Practitioner is the really responsible and useful practitioner, but that his services are ignored, and his abilities and qualifications degraded in the eye of the world. Thus we see that the deprivation of titular rank and official status mean the same thing and proceed from the same spirit.

THE LICENTIATES OF THE COLLEGE OF PHYSICIANS.

We refer our readers to the Letters in our Journal of this day, upon the assumption of the rank and title of a Doctor of Medicine by those Licentiates of the London College of Physicians who have not obtained the University Degree of M.D.

The question at issue seems a very simple one, and its solution free from difficulty.

The clause of the College License, so triumphantly quoted, must be interpreted by the power granted to the College by the Crown. If the Crown has not given the College the power of granting the Degree of Doctor of Medicine,—as most undeniably it has not,—then *Medicus* is the only title the College can bestow. Consequently, as we have before stated, and again repeat, the holder of the license, as such, has no more right to style himself M.D., than has the Licentiate of the Apothecaries', or the Members of the Pharmaceutical Societies.

THE LUMLEIAN LECTURES.

It is with much satisfaction that we this day commence the publication of the Lumleian Lectures, delivered at the Royal College of Physicians, by Dr. Todd, and revised by the learned Professor himself. Whether we consider the exalted position Dr. Todd holds in the Profession, or the importance of the subject of which he treats, our readers as well as ourselves cannot but be gratified, that so distinguished a Teacher is a contributor to our pages.

WARDROP ON THE HEART.

We are happy to inform our readers, that this work being now completed, its publication will be regularly continued in our Journal.

REVIEWS.

A Dissertation upon Dislocations and Fractures of the Clavicle and Shoulder-joint; being the Jacksonian Prize Essay for 1846. By Thomas Callaway, F.R.C.S. London: Highley, Fleet-street. 8vo. Pp. 178.

The authorities of the College of Surgeons have, for the most part, exhibited discretion and judgment in the selection of subjects for the Jacksonian Prize Essay. The subject for competition has been generally one which was not fully understood, and upon which a good deal of new light might be thrown, by those who would diligently set themselves to the work. Information of great value has thus been obtained. Treatises alike creditable to the College, and to the fortunate gainer of the prize, have been sent forth to the world; and the youthful surgeons of England have been stimulated by a wholesome and noble ambition to add to the rich stores of surgery.

But the same judgment has not *always* been shown by the Council of the College. Occasionally the subjects proposed have been so thoroughly worked out, and so well understood, that there has been little or no scope left for the efforts of an industrious and ingenious mind, and little of novelty to be added, which at the least could be of any practical value.

The present work is an example of this. What practical novelty can be found in a subject which has been so well studied by the late Sir Astley Cooper and other great surgeons, and so well understood by most educated Practitioners?

With this feeling we have carefully read Mr. Callaway's Prize Essay; and, although the result was as we anticipated, yet we do not think the time thrown away; and we must give the Author the credit of having made a very respectable book, and of having put together a great many facts which will be useful both to the student and the practitioner.

Prior to entering upon the consideration of the accidents to which the parts about the shoulder are liable, the author has given a correct and somewhat concise description of the anatomy of this region, and carefully explained the action of the various muscles in connexion with the clavicle, and humero-scapular articulation. An accurate knowledge of the separate structures, and of their functions, particularly of the muscles, is obviously necessary to a correct appreciation of the various accidents which are afterwards treated of.

On the subject of fracture of the clavicle there is nothing novel or striking, with the exception, perhaps, of a somewhat glaring error, which we think it our duty to point out. After describing what are usually the symptoms of a fracture of the clavicle internal to the coraco-clavicular ligament, the author subjoins an original case, which "may be taken as a type of the accident," and on looking into it we do not find a single symptom of such injury, much less any of its striking features.

This is all he tells us as far as symptoms are concerned:—

"On his admission, a well-marked fracture of the clavicle was discovered; it appeared to be oblique, and the fragments held their common relation. On drawing the shoulders back, nearly all deformity disappeared."—P. 52.

We confess that there is nothing in this description which can have any pretension to typify the accident of a fractured clavicle, we are merely told that a well-marked fracture did exist; but, as regards the signs which indicated it, the reader is left to conjecture for himself. The Author should recollect, that in describing a particular case it is of the first importance to give the distinctive symptoms or signs in detail, and not to slur them over. We are more particular in making these remarks, as we find in other parts of the work, where he is giving "original cases" as the types of the various accidents, the same laxity of describing particular symptoms and marks of such injuries; for instance, let the reader look to two cases of dislocation of the clavicle, given at pages 79 and 80.

In speaking of fracture of the scapula, the Author refers to the great rarity of the accident, particularly of that of the neck of the bone; it was formerly considered to be an accident of frequent occurrence, but the absence of such specimens from the various pathological museums goes far to prove that it is an injury rarely met with. Mr. South is of opinion that such never occurs; but there is no reason why this accident may not occasionally occur to the neck of the shoulder blade, although it may not be possible to discover its existence during lifetime, no distinctive signs existing.

The chapter on Dislocations of the Shoulder-joint is somewhat elaborate, and contains a great deal of useful matter respecting the causes, symptoms, and treatment of the various forms of this injury. Some statistical Tables are also added. The following is the Author's description of the situation of the head of the bone in the dislocation downwards:—

"The head of the bone in the dislocation downwards may have two situations, either lying against the anterior costa of the scapula and towards the ribs, that is, in the axilla, or it may be driven among fibres of the subscapular muscle, lying almost on the subscapula fossa, while the neck is embraced by some of the fibres of the muscle. The former is that form of dislocation in which there is lengthening of the arm, and which is so easily reduced; while, in the latter, the lengthening is less marked, often absent, and the difficulty of reduction greater."—P. 108.

Amongst the symptoms the Author relates, as dependent upon this dislocation, he has only slightly made mention of one which is almost invariably most striking, we mean, numbness of the corresponding hand. In our experience of this accident we have so frequently this symptom, that if a patient who had received an injury to the shoulder, was holding the arm with the other of the opposite side, and was complaining of great numbness in the hand, we at once concluded that a dislocation into the axilla existed,—and we cannot call to mind that we were ever mistaken,—and our reliance was mainly upon this one symptom, which we believe to be a most important one, and not sufficiently insisted upon by the generality of authors.

The treatment of a dislocation of the humerus forwards under the clavicle, is dismissed rather in too summary a manner. It should be recollected, that it is a more difficult dislocation to reduce than the one in the axilla, although, according to Mr. Callaway, it would not appear to be so. If the injury has happened some twenty-four hours before proper attempts at reduction are made, and the head of the bone has become fixed, great difficulty will be experienced; it may be necessary to use a great deal of force. We have seen the greatest exertions fail in the hands of various surgeons, in a dislocation forwards of some hours' standing. In one instance of this nature, to which we were called in consultation the pulleys failed after a patient and powerful attempt, and the mode in which we ultimately effected the reduction was as follows:—Standing on the bed, over the patient, we laid hold of the injured arm by the wrist, and thus lifted him up several times, and turned the limb about, somewhat roughly and rapidly in all directions, until the muscles were completely exhausted, when, suddenly getting behind the patient, and placing the knee in the arm-pit, and forcibly drawing the arm across it, the head of the bone turned into its socket.

Compound dislocation of the shoulder-joint is

almost entirely overlooked by the Author; it is an injury which, in these days of machinery, not unfrequently takes place. We met with one case some time ago, where a most successful termination took place, and a most useful limb was preserved, although, at the time, the injury was very formidable, and there was great difficulty in reducing the head of the bone.

The Author has paid some attention to the injuries of the biceps tendon, and has referred to the cases which have been published, with some remarks of his own upon the nature and symptoms of these accidents.

The injuries of this tendon are of two kinds, rupture and dislocation; it no doubt happens that these accidents are of not unfrequent occurrence, although the symptoms, during life, are not sufficiently plain to enable the surgeon to form a correct diagnosis. After having enumerated some of these symptoms, the Author states:—

"Both dislocation and rupture are, besides the above-mentioned symptoms, accompanied with lateral and posterior flattening of the shoulder, and prominence of the head of the bone anteriorly, from which latter circumstance it happens, that the injuries are mistaken for a partial dislocation."—P. 149.

These injuries to the biceps tendon are of interest in a pathological view; and we believe that, in accidents about the shoulder-joint, it not unfrequently happens, either a rupture or dislocation of the tendon takes place; and this is easily understood, when the situation of the tendon is borne in mind. In a practical point of view, they are of less interest, as, in the first place, there are no unequivocal signs by which they can be detected during life; therefore, any particular treatment must be unsatisfactory; and the Author himself states, that treatment can do but little.

Fracture of the neck of the humerus is of frequent occurrence, and, in many instances, is difficult to treat satisfactorily. Sometimes even the diagnosis is not easy. The following is the Author's description of the symptoms of fracture of the anatomical neck:—

"When the shoulder is examined, a projection of bone is perceived upon the point of the coracoid process; and when the elbow is raised and brought forwards, this projection is rendered particularly conspicuous. By drawing the arm down, the projection is removed, but it immediately re-appears upon giving up the extension, and the natural contour of the shoulder is lost. Although the accident has occasionally been confounded with dislocation, the diagnosis is not very difficult. 1st. In the fracture, there is great mobility of the arm; whereas, in dislocation, the arm projects stiffly outwards, and slightly forwards from the side. 2nd. The flattening of the shoulder is much less in fracture than in dislocation; in the former, it is produced by the traction on the deltoid by the weight of the arm, and diminished by the presence of the separated fragments. This sign is, of course, variable, and dependent upon the degree of swelling and effusion. Sometimes, however, the fractured shaft may be drawn inwards by the muscles, and this, when accompanied by any great effusion, might, to an inexperienced eye, prove a source of fallacy. The presence of crepitus, and the absence of any shortening, would place the matter, moreover, beyond doubt."—P. 162.

The Author relates several interesting cases of fracture of the neck of the humerus, and with these concludes the work, which we have read, not without pleasure or profit, although, as we have before said, we did not expect to find anything striking or novel in it; nevertheless, it is, on the whole, a very fair treatise on the commonest forms of injuries connected with joints, which the surgeon is called upon to treat. We cannot but heartily agree with the concluding sentiments of the Author:—

"Throughout I have been impressed, and that to a most forcible degree, with a void in our professional knowledge, or, rather, with a vivid sense of the suppression of a certain point of it. I am sure every one must acknowledge the extreme value of a complete system of accurate Hospital Reports; and no one can, I think, reflect upon the vast quantity of valuable material that every hospital annually furnishes, in the shape of cases, either illustrating the generic features of some peculiar class of disease or injury, or instructing us in some truth, by the elimination of some novel and important fact, without feeling how great is the scandal that results to us from our culpable neglect of this important advantage."

REPORTS OF SOCIETIES.

WESTMINSTER MEDICAL SOCIETY.

April 13, 1850.

Dr. Murphy, President, in the Chair.

Mr. Harvey exhibited a bivalved, infundibuliform speculum auris, made by Ferguson, which he considered to be an improvement on the instruments at present in use. It affords more power in the separation of the blades, and enables the surgeon to make a more accurate examination of the meatus, and extract foreign bodies from it with greater facility.

CIRCULAR ULCER OF THE STOMACH: CARDIAC AND AORTIC VALVE DISEASE.

Dr. Taylor exhibited specimens of these morbid changes, which had been taken from the body of a man fifty-three years old, lately a patient at St. Pancras Dispensary. Seven years ago, he suffered for three months from an attack of rheumatic gout in the right knee, by which he was long confined to his bed. About three years ago, he began to complain of cough, dyspnœa, occasional palpitations of the heart, and swelling of the legs, with occasional drowsiness. These symptoms continued till within the last six weeks, when they suddenly increased greatly; the cough became more frequent and violent, the palpitations more severe, and the breathlessness amounted to orthopnœa. On making an examination of the chest, Dr. Taylor discovered a slight tenderness over the epigastrium, which, it appeared, had existed for several weeks, and sometimes amounted to pain, darting through to the left scapula. Last Sunday morning, he was seized with vomiting of blood, which continued till several pounds were lost, and he died in eight hours from the commencement of the hematemesis. The examination of the body was conducted by Dr. Taylor and Dr. Routh. The heart was enlarged, pale and flabby, collapsing when laid on the table; numerous white spots were found in the course of the coronary arteries; the walls of the ventricles were thickened, the carneæ columnæ much hypertrophied, the cordæ tendineæ thick and rigid. The septum was an inch and a half in thickness. The edges of the mitral valve were thickened, and the aortic valves consolidated into a thick, irregular, bony mass, one of them being separated from its attachment to the aorta, leaving an aperture through which the circulation was partly carried on. The right auricle, and the auriculo-ventricular orifice were much dilated. The stomach was distended with blood; about two and a half inches from the pylorus, in the smaller curvature, there was a large circular ulcer, an inch in diameter, with smooth and regular edges; it involved the mucous and muscular coats, and had opened into the coronary vein, whence the fatal hæmorrhage had come. The kidneys were in an advanced stage of Bright's disease. After the discovery of the ulcer in the stomach, Dr. Taylor learned from the friends of the deceased, that he had had, for the last year and a half, some slight uneasiness in the region of the stomach, to which, however, he paid but little attention, as it rarely amounted to pain. The appetite remained good until two days before death.

Mr. Canton inquired if any blood had been discovered in the cavity of the abdomen, as the ulcer completely perforated the coats of the viscus. The perforation, however, might have been made during the examination, as the organ was in a state of softening.

Dr. Taylor replied that there was not any blood in the abdomen, and that the perforation had been made while examining the viscus after death.

Mr. Canton drew the attention of the Society to a peculiarity which had not been alluded to by Dr. Taylor, and which was well displayed in the preparation; viz., a net, or cordlike condition of the aortic valves. This state, Mr. Canton observed, had been by some thought to be a congenital imperfection, whilst others attributed it to disease. It has attracted the attention of Bizot, Kingston, Chevers, Wilkinson King, and other authorities. It affects those portions of the valves which come in contact, and is mostly confined to the lateral edges near the upper part of the thinner and more membraniform structure. The due action of the valves is not interfered with, and the peculiarity Mr. Canton finds to be far from uncommon in aged persons. He has ordinarily, in them, found the sigmoid valves of the pulmonary artery similarly affected; and this condition has been associated with a normal state of the heart. No symptoms, during life, lead to the anticipation of finding this change after death. Mr. Canton added, that though he had especially sought for the appearance in a large number of subjects, of all ages under forty years, he had never discovered it prior to that period of life, and did not believe it to be congenital. He had in a very few instances, in children, seen cords running from the edge of the valves to the sesamoid body towards the upper part; but they were connected to one another by more delicate tissue than usually composes this portion of the valves. An atrophy which was, at the same time, probably, in operation on other textures, was likely to be the cause of the appearance; and this view is strengthened by the frequency with which the alteration may be seen in the aged. Vegetations on the cords are uncommon; and the unusually large perforation of one of the valves, in Dr. Taylor's case, has occurred at the lower part of the valve,—a situation in which the cord, or netlike appearance from atrophy, is never to be found.

Dr. Webster, F.R.S., read a paper, entitled,

REMARKS ON THE HEALTH OF LONDON DURING THE SIX MONTHS ENDING THE 30TH OF LAST MARCH.

Adverting to his previous communication made to the Society at the first meeting of the present Session, the Author said, the remarks he now proposed reading were intended as a continuation of the subjects then discussed; and, he believed, they would, perhaps, seem more interesting to the fellows, when they heard, by way of preface, that the public health in London, during the last six months, had been satisfactory, as shown by the amount of deaths being less than the ordinary average, and still more so, seeing they were considerably under that of the parallel six months of the previous year. For instance, 30,163 persons then died in London, whereas only 26,096 were carried off during the recent period; being a diminution of 4067 deaths, or more than 15½ per cent. in favour of the winter just terminated. This favourable aspect chiefly arose from the diminished mortality of several diseases that proved both prevalent and fatal during the six months first mentioned. Thus, scarlatina, which destroyed 2541 individuals, during the six months ending the 31st of March, 1849, was only fatal to 685 patients in the corresponding months of the recent season; being a diminution of 1856 deaths from that disease. Again, by typhus, 962 persons have died recently, against 1582 during the corresponding sixth months of last year; being a decrease of 620 deaths in the by-gone six months. By small-pox, only 194 deaths are recorded during the two quarters ending the 30th of last March, instead of 641 in the previous period; thus making 247 fewer fatal cases by that frequently virulent malady. From diseases affecting the organs of respiration, including phthisis, Dr. Webster then remarked, that the difference of mortality was in favour of the present year, especially during the last quarter; 4428 having died from complaints of the above description, instead of 4616 recorded, by the same causes, during the parallel three months of 1849; or a decrease of 188 deaths in that period. The Author next adverted to cholera, which did not subside till towards the close of 1849; seeing 494 persons died from that malady in the fourth quarter of last year; but, in the first three months of the present, only 8 fatal cases have occurred in London by that epidemic, instead of 516, who became its victims during the similar quarter of 1849. Influenza, which proved so very destructive in the six winter and spring months of 1847 and 1848, as to carry off 1739 persons in London alone, has only proved fatal in 87 cases dur-

ing the corresponding period ending the 30th of last March; whilst it was also an equally mild disease in the winter of 1848 and 1849, seeing only 77 deaths are recorded from influenza in the latter season. The author subsequently alluded to the diseases which have recently exhibited an increased rate of mortality. The first he mentioned was measles, whereby 641 individuals, mostly children, died during the six months ending last March, contra-distinguished to 391 throughout the corresponding period of 1848 and 1849, thus making an excess of 250 deaths by that eruptive complaint, in the recent half year. By hooping-cough 715 children have recently died, against 645 during the six months of 1848 and 1849, being an increase of 74 deaths from pertussis in the more recent season. From affections of the brain and nervous system, so often fatal in this country, there has been a trifling diminution, 3,092 persons having died from these diseases during the six months terminating the 30th of March last, compared to 3,152 in the corresponding period of 1848 and 1849, thus giving 60 fewer deaths recently by these maladies. Respecting complaints of the heart and blood-vessels, the number of fatal cases have been almost identical, 1010 persons having died from these affections during the six months embraced in the present report, against 1002 in the corresponding period, ending the 31st of March, 1849. Afterwards some remarks were made relative to childbirth and puerperal fever, which, last season, proved less fatal than previously, 339 females having died from such causes during the two quarters terminating in March, 1849; whereas the deaths were, from similar causes, only 242 in the corresponding six months of the present season; hence making a decrease of 97 fatal cases, or of upwards of one-fourth in the recent rate of mortality. Dr. Webster then alluded to hydrophobia, of which horrible disease a fatal instance recently happened in London; where, fortunately, such occurrences have been very rare, compared with former seasons. The unfortunate patient was a girl aged four years, who had been bitten by a mad dog 101 days previous to the day she died; thus showing, that a person is not always safe, although six weeks —commonly believed sufficient—may have elapsed after exposure to the virus. When dogs were formerly employed in drawing vehicles through the streets of London, hydrophobia was much more common than now, only the above, and another case, in 1848, having taken place, throughout the metropolis, for upwards of three years; whereas, during 1838, 12 fatal instances by the above dreadful death are recorded, with others in subsequent years; the recent diminution of this malady being, in the Author's opinion, chiefly owing to the above-named new police regulations. Compared with the facts now stated, although, perhaps, not generally known, hydrophobia is much more frequent in other countries than in England. For instance, in Prussia, during 15 years ending 1834, as many as 1073 individuals—527 males and 546 females—fell victims to hydrophobia, for which there is no remedy; the only chance of safety, when bitten by a rabid animal, being immediate excision of the wounded part, and the application of cupping-glasses afterwards. The large number of children and young persons, who annually die in London, next occupied attention; respecting which important question, the Author stated, that of the 13,219 deaths registered, from all causes, during the first quarter of the current year, 5,484 were under 15 years of age; so that about 41½ per cent. of the whole mortality occurred in young persons, many being infants. Besides scarlatina, pertussis, and measles, which always prove so fatal in children, as already stated, the author mentioned hydrocephalus and convulsions. By the latter complaint, 482 individuals died during the last quarter, all being, with few exceptions, infants or young persons; only 3 having passed their fifteenth year. From hydrocephalus 370 deaths are also recorded in the same three months; only three of the cases having attained the age of puberty. Commenting on these facts, Dr. Webster considered, the younger the patient, the greater the danger which attended such complaints; whilst the Practitioner may, with more confidence, give a favourable prognosis in older persons than in infants, or in those of early age and feeble constitution. The number of young persons who lose their lives by violence in London is also remarkable; thus, besides other causes, not fewer than 79 individuals, under 15 years of age, perished by burns and scalds, since the 1st of January. Again, from the want of breast-milk, 39 infants are stated to have died during the same quarter; whilst, in the two previous years, 1848 and 1849, it is reported, that 347 infants died from the same cause. Such a large mortality from the want of breast-milk, the author thought mainly arose from the objectionable practice so prevalent among the upper and middle ranks in this country, of employing wet-nurses, instead of following the true dictates of nature, which enjoin each mother to suckle her own offspring, a practice alike beneficial to the parent as to the child. Besides, it should be also remembered, that in consequence of the former unnatural proceedings, the hired nurse's own infant being generally fed by hand or neglected, it very frequently falls a sacrifice to lucre and fashion. Dr. Webster animadverted strongly respecting this custom, and added, excepting in very particular cases, and where the mother is totally unable to afford sufficient or proper nourishment to her own infant, the employing others should never be sanctioned, not only on physical but on moral grounds. The practice is contrary to Nature's laws; is injurious to mother and child; and, further, it holds out a premium to immorality, seeing strange nurses are well paid, highly fed, and often pampered luxuriously, quite at variance with their previous position; hence, especially if unmarried, they become tempted again to qualify for another similar situation. Besides the cause now adverted to, as influencing the mortality of infants and children, the Author enumerated improper feeding, defective clothing, and exposure to the vicissitudes of the weather in this variable, although otherwise healthy climate, even among the affluent or those in comfortable circumstances, but still more amongst the poor and dissolute. Dr. Webster then referred to the large amount of deaths reported from hospitals, workhouses, and prisons in the metropolis; nearly one fifth of the entire number, from all causes, having taken place amongst such inmates, or 2353 fatal cases out of the total mortality, amounting to 13,219 during the months of January, February, and March of the current year. This, however, did not include dispensary patients, out-door parish paupers, nor those so often attended gratuitously by practitioners. If all eleemosinary cases were taken into the calculation, it would be then no exaggeration to say, that at least one-third of the sick persons who died in London received unpaid services from many very hard-worked, and but too frequently ill-requited members of the Medical Profession. Various causes contributed to produce the recent satisfactory state of public health in London, which the Author next discussed; the chief beneficial influences being, in his opinion, the improved physical condition of the metropolitan population; the abundance of cheap and good provisions; the increased attention given to sanatory measures; the greater care paid by individuals to their own health, after the alarm experienced last summer and autumn; the less variable and more salubrious constitution of the atmosphere recently noticed; and lastly, so large a number of the debilitated, dissipated, and diseased portion of the community having died during the epidemic cholera and diarrhœa of 1849, that there actually remained less *pabulum morbi* than in previous or ordinary years. Dr. Webster then described the atmospheric phenomena prevalent during the last three months, when London proved so healthy; and he made several elaborate, yet interesting statements thereon, of which it is difficult to give here any abstract. However, it may be stated, that he ascribed much of the unusual salubrious condition of the metropolis during the first quarter of the present year, to the temperature of the air being generally less variable than in other more unhealthy seasons, especially as the difference between the cold of the day and night-time, was often inconsiderable. The weather, although cold, never became very inclement, whilst the sky was generally cloudy or overcast; the wind frequently S.W. or southerly; electricity was often positive, and the barometric pressure generally ranged high. Taking every circumstance into consideration, and speaking from observations made during late years, respecting the influence of the atmosphere, &c., in causing or modifying disease, Dr. Webster felt fully warranted in saying, whenever the difference between the temperature of the day and night-time was excessive, with cloudless or even hazy weather, especially if calms prevailed, or only slight winds, if the electricity was small, the quantity of moisture so inconsiderable as to make the air dry for any continuance, with a low barometric pressure, then sickness will abound, and more deaths be consequently registered than under different atmospheric phenomena. On such difficult yet important subjects, as those now brought under notice, Dr. Webster referred for information, and as examples to imitate, to Hippocrates, Aristotle, Galen, and Aretæus, amongst the ancients, or to Sydenham and others, in more modern times; whose writings physicians should peruse, if desirous of obtaining knowledge respecting the points under discussion; which study cannot prove otherwise than highly useful, when investigating the origin, nature, and management of epidemics, as likewise of even many ordinary maladies. The Author then adverted to the important and interesting fact often noticed after the disappearance of a very fatal epidemic malady; when, generally speaking, the rate of mortality declines considerably during the subsequent season. This beneficial result followed the cessation of influenza which prevailed so severely during the winter of 1847 and '48; the number of deaths from all causes having fallen 3490 during the subsequent quarter, terminating the 30th of June, 1848, contrasted with the three months ending the 31st of March previously. Again, after scarlatina, which was so fatal in the winter of 1848 and '49, the mortality from all causes, during the quarter ending the 30th of June, 1849, decreased 2430, compared with the number registered in the three months terminating the 31st of the previous March. A similar effect followed the epidemic cholera of last year; and hence, it may be almost predicted, with some certainty, whenever any severe malady prevails in the community, whereby numbers fall a sacrifice, the subsequent year will very likely prove salubrious, and furnish a smaller rate of mortality in comparison with the former unhealthy season. After several other general remarks, Dr. Webster, when concluding his paper, said, that similar to the observations made of late years, by most Medical Practitioners, the common character, or diathesis of most diseases, throughout the past six months, has become as thenic; and, in many cases, accompanied by great debility, or exhaustion, which required support, and often tonic treatment, although the symptoms apparently seemed sometimes so inflammatory as to warrant antiphlogistic measures. This peculiarity was, however, less remarkable during the recent season, than in those immediately preceding; in which almost every form of malady, if not during the early stages, very soon afterwards assumed an asthenic character. Such was especially the case when influenza proved so fatal two years ago; again, during the prevalence of scarlatina, in the winter before last; and lastly, but even more decidedly, at the time cholera, diarrhœa, and dysentery produced such great ravages amongst the metropolitan population as to send rapidly to their graves, in the months of July, August, and September of last year, actually 15,512 human beings by these three diseases; thereby making, with other fatal maladies, a larger comparative amount of deaths ever previously recorded in London, during so short a period, since the great plague, upwards of 184 years ago; at which epoch, as last autumn, a much more extensive mortality occurred, than the author hoped will be again witnessed by the present generation, in the mighty metropolis of England, now teeming with its 2,300,000 inhabitants, forming the emporium of intellect and the centre of civilization.

Dr. King observed, that he quite agreed with Dr. Webster as to the value of the Registrar-General's Returns, but he could not regard them as being quite complete, as any one endeavouring to investigate the causes of any particular disease by their aid, must find certain points wanting, suggestive of a new form of schedule, which must, sooner or later, be adopted. The great alternations from extreme heat to extreme cold, during the epidemic of 1849, were very important; and such changes must be attended to in all observations on the spread of epidemic diseases. The meteorological data should, in all such cases, be carefully examined. Dr. Webster had furnished quite sufficient evidence to demonstrate the importance of these matters, by showing the influence of these alternations in keeping up these diseases. He (Dr. King) could bear him out in his remarks on convulsions, which prove destructive, to a very great extent, in certain districts in London. They occur entirely in early life; the disease is strictly confined to the first two or three years of infancy. The amount of mortality from convulsions is such as to require a very careful investigation as to its causes. With regard to hydrocephalus,—a disease also restricted to the early period of life,—there occur not so many deaths from it as from convulsions; the deaths from consumption are a mere nothing to the mortality from convulsions. He (Dr. King) could not agree with Dr. Webster in his remarks on suckling; in many instances, the mother was not a fitting nurse for her child, but, on the great scale, Dr. Webster was in the right. Taking, for instance, the higher classes of society: he understood that the milk of a certain exalted personage was unwholesome, and, notwithstanding her earnest desire to suckle her own child-

ren, her medical attendants were strongly opposed to, and would not allow it. The mode of living followed among the higher classes of society was such as to render the milk of the mother unwholesome for her child. He (Dr. King) had known instances of infants fed for a short time—say a fortnight—on the mother's milk, and then brought up by hand, proving very fine children. He knew this from experience, but could not say how far it would be borne out on a large scale. When mothers suckled their children for a great length of time, convulsions are apt to come on; of this he (Dr. King) had seen several cases, from which recovery could only be expected by weaning, and sending the child away. The change of air might perhaps influence the recovery, but he believed a great deal ought to be attributed to the abstraction from an impaired milk. He (Dr. King) could not agree with Dr. Webster in his observations respecting the re-appearance of the cholera, based, as they were, on the alternations of temperature. He (Dr. King) thought there must be some other disturbing cause, and Dr. Webster's own statements afforded reasons to doubt the correctness of his conclusions. When the cholera had been very fatal in any place, it was not found to re-appear there soon, but when its attack was very slight, it soon broke out there again. This was so well known in India, that an officer would not march his troops into a town where cholera had prevailed but slightly, but would do so if the attacks had been numerous and severe. According to these views, therefore, there is every reason to believe the disease will not re-appear here, as it was so severe and fatal last year. The investigation as to the causes and nature of the epidemics to which London is subject, was a very important inquiry, and a great service would be rendered by those who would carefully examine the Reports of the Registrar-General, and trace the sources and localities of mortality. The greater number of deaths occurred in certain small spots, not in the great squares. So much so is this the case, that cholera has been called the poor man's disease. In Church-lane, St. Giles', for instance, there has been an awful mortality from convulsions, hooping-cough, measles, fever, &c., and yet no death has ever occurred there from scarlet fever. In some of the streets in St. Giles', it has been remarked that no death ever occurs from some particular disease; in one street, none from scarlet fever; in another, none from measles; in another, none from small-pox, &c.

Dr. Tyler Smith explained, that the great frequency in the reports of deaths from convulsions was owing to a fallacy in the returns. It is usual in reporting the cause of death, to set down the last disease which is encountered. Now, convulsions are usually met with towards the termination of fatal diseases in children, and this renders it apparently so frequently the cause of death. At the same time, it must be admitted, that convulsions are very prevalent, the nervous system in children being so much more excitable than in adults. Convulsions are not a disease, but generally a symptom of some other disease—and a very common one among children. It should not be spoken of as a distinct disease, or it will lead us into error. If a child die from asphyxia, or from disease of the heart, or from injury received during its birth, it will die in convulsions, which are symptomatic and not idiopathic.

Dr. Snow referred to contagion as one of the principal causes of the spread of cholera—a cause which had been unnoticed by Dr. Webster. He (Dr. Snow) did not consider so much reliance was to be placed on the alternations of temperature as leading to the spread of epidemic diseases, as did Dr. Webster, for during the prevalence of cholera last year in London, Leatherhead entirely escaped, although only twenty miles from London, and consequently subject to the same variations of temperature. There was not any evidence at all events to the contrary.

Dr. Willshire remarked that although the reports of the Registrar-General were capable of being applied to some points touched upon in Dr. Webster's paper, yet there were others, and those the purposes of precise medicine, for which as yet they did not, in his opinion, appear to be available, on account of the want of precision so frequent, he believed, in certificates of death. For instance, he would refer to the subjects of hydrocephalus and convulsions upon which the author of the paper had prominently dwelt. With regard to the rate of mortality arising from the former, he would ask the author what was meant by this disease, what did he assume was the pathologic condition intended to be certified as the cause of death? He (Dr. Wilshire) believed, that as a rule, no precise result could be arrived at, because under the term hydrocephalus very different affections were jumbled together, sometimes primary, sometimes secondary ones. Tuberculous meningitis, simple acute meningitis, hydrencephaloid disorder, brain complication in remittent or typhoid fever, &c., were, he thought, in many instances, certified under hydrocephalus. Then again with regard to convulsions; are we to assume that in all the deaths certified from this cause, the convulsions were truly the disease, that they were essential convulsions as they have been termed by the continental pathologists, and that they were not sympathetic, symptomatic, or secondary of some primary and the true disorder. Rather might not many of these deaths be said to be from pneumonia, diarrhœa, tuberculous meningitis, central congestion, &c.; in the course of which convulsions came on, and the child died. Convulsions were the delirium of children; they were the ordinary sequences of many very different disorders. In some instances in the reports, he considered that often the primary disease was alone certified as the cause of death, whilst it really was most essential to know what was the secondary or complicating affection; whilst in other cases the secondary was set down in the certificate, where it was most requisite to be acquainted with that which was primary. Dr. Webster had spoken of many deaths from hooping cough. He would ask Dr. Webster how often he thinks simple pertussis proves fatal? He knew that bronchi-pneumonia, effusion of blood beneath the arachnoid, tuberculous meningitis, cerebral congestion, &c., all of which in various grades of frequency might complicate pertussis, often prove fatal. To say, therefore, how many children died of hooping-cough was to him, as an officer of the infirmary of children, really to give him very little available information; what he would wish to hear was how many children died from certain well defined secondary affections supervening in the course of the original affection, it being at the same time proved to him that the former were but accidental or coincidental phenomena which, in all probability, would have occurred without the pertussis. With regard to Dr. King's observations on dry nursing, &c., he must own he differed entirely, and wholly coincided with had fallen from Dr. Webster. Dr. King had told the Society how many infants he had seen thrive who were dry nursed, after being suckled for only two or three weeks; but Dr. King had not informed them how many had been subjected to the like procedure, of whom nobody had seen anything more at all. Dr. King had dwelt much upon the ravages of convulsions. He would ask him were these convulsions essential or sympathetic?

Dr. Webster remarked, in his reply, that Dr. Willshire and Dr. King did not consider the reports of the Registrar-General as sufficiently accurate to answer every purpose. It was very possible they were not so, but when they were compared with the reports first issued, and with the reports published by the parish clerks, he (Dr. Webster) must testify to their exceeding value, and to the improvement discoverable in them every year. Dr. Willshire had alluded to convulsions—a subject involved in considerable donbt. It was an old term, which often included diseases which really were not convulsions; but still the disease itself was of frequent occurrence among the children in this city. He had not had any intention to allude to contagion, as causing the spread of cholera, and indeed only incidentally to cholera itself, as it would have occupied too much time to investigate every cause of disease. He questioned, however, Dr. Snow's assumption that the variations of temperature were nearly the same in London and Leatherhead, as it was certain there frequently existed great differences in the state of the weather in places much nearer each other than those two localities. His (Dr. Webster's) meteorological observations applied to London only. He still held to his opinion respecting suckling, in spite of the remarks that had fallen from Dr. King. Dr. King had stated that the habits of the higher ranks were such that mothers could not supply their offspring with nutritious milk, such as was suitable for infants. His argument told against himself, for if those ladies did suckle their own children, their love for them would cause them to abandon all sources of dissipation and excitement, such as theatres, the crowded ball-room, late hours, the card-table, high living, &c., and thus they would be able to furnish their children with healthy nutrition, and be themselves happier in every respect.

CORRESPONDENCE.

SELF-SUPPORTING DISPENSARIES.

[To the Editor of the Medical Times.]

In my last, I spoke of the abuses of the present dispensary system, and the several remedies proposed. To day I propose meeting the objections made against self-supporting dispensaries, and pointing out their advantages, and the manner in which the principle might be applied to the dispensaries already established.

1. It has been averred, that their establishment is illegal; because, as the management of dispensaries is usually entrusted to lay committees, not members of the Apothecaries' Company, they cannot legally sell medicines to the poor.

I pass over here the argument that might be adduced, to the effect that, in those places where they have hitherto been established, and especially in those instances where it has been alleged that ill-feeling existed between the Medical Officers of such a Dispensary and the Practitioners in the neighbourhood, they have never been put down. I shall be content with annexing the following legal opinion:—

"By the Apothecaries' Act in Geo. III., lv., cap. 194, chemists and druggists are exempted from its provisions; also surgeons and physicians in their respective departments; and probably medicines administered by a surgeon, which are ancillary to a surgical case, may be always recovered in a Court of Law.

"It has also been decided, *that practising as an apothecary is the mixing up and preparing medicines prescribed, either by a physician or by any other person, or by the apothecary himself.*

"I am therefore of opinion, that a lay Committee would not fall within the provisions of the Act, if, as I understand, the drugs are merely given, and the Medical advice sold; or even (to make the case strongest) *the drugs are to be sold by the Committee, without the exercise or profession of direction as to their application to any particular case.* I do not, therefore, consider they would act in any way that is prohibited by the statutes; *for the drugs would be mixed up by the duly-qualified apothecary of the Institution,* under the direction of the Medical Officers.

"A. W. Hoggins, LL.B."

2. Is it consistent with the original intention in which most of our metropolitan dispensaries were founded, to convert them into Benefit Societies, or engraft upon them a self-supporting branch; and, would such a measure not tend to lower the character of these Institutions, as a charity for the benefit of the sick poor, in the eyes of the Governors.

To answer the last part of this objection first. The object of all dispensaries, it is presumed, is to do as much good as possible to the sick, but not to encourage deception and pauperism. The facts adduced by Dr. Stewart, those which we have heretofore mentioned, prove that such is the tendency of dispensaries as at present constituted. Any measure, therefore, which will increase the usefulness of a dispensary and discourage demoralization, can only raise the character of these Institutions in the eyes of all good men.

2ndly. There is no intention, in the plan about to be proposed, to convert these dispensaries into Benefit Societies. This will be seen in the sequel.

3rdly. However excellent Mr. Smith's plan is, it is somewhat difficult of application in all cases. Where no other dispensaries exist it may be the best plan; but where they do, the plan requires to be modified. Ultra measures, which must inevitably result were the conversion at once made, or were opposition dispensaries, after his plan, established in the neighbourhood of every other dispensary, are not in accordance with the successful measures of reform congenial to the spirit of this realm. One thing should be borne in mind,—it is, and must always be, more easy to make a small modification in the constitution of any Society or Corporation,

where the change contemplated is not entirely opposed, or directly subversive of the original intention in which they were established. If these Provident Dispensaries are to be everywhere established, in direct opposition to present dispensaries, may it not be feared, that the good feeling which might have existed in the Profession on this question may not give way to party squabbling and division, unfortunately too prevalent in the Medical world; and, in this manner, a beneficial measure, if not altogether prevented, may be almost completely neutralized. The attempt to compromise should be first made, and moderate measures first entertained. With the prejudice so prevalent against new Institutions, and the necessary heavy preliminary expenditure for their first establishment, it certainly does appear to me more easy to engraft some modified plan in an old Institution, governed by a Committee already well-known and respected, whose long connexion with dispensaries gives confidence in their actions, and already provided with a well-regulated Medical staff and good house accommodation.

3. The principal objection, however, has been this, that Self-supporting or Provident Dispensaries will greatly interfere with the profits of General Practitioners, and create much ill-feeling against the Medical Officers attached to these Institutions.

(a) In a letter addressed to me, and in answer to this last objection, Mr. Smith believed that, properly managed, they would *not* have this tendency. I have heard it alleged, however, in one case, that ill feeling existed between the Dispensary Medical Officers and the neighbouring Practitioners; so much so, that the latter refused to meet the former in consultation. I do not pretend to assign the reason. It may have been because the former interfered with the latter, or some other accidental cause. But even then it is believed that the case of a small country town and a large metropolis do not admit of comparison—a population of millions with thousands. Moreover, this feeling of jealousy is much more likely to be called into existence by gratuitous medical relief than that which would require some small amount of remuneration in return. That it does so, I believe all will admit. Dispensary are not like hospital appointments; and except where it is for some special disease, or in the obstetric department, the Medical Officers are rarely, if ever, called into consultation by neighbouring Practitioners, by reason of their connexion with them. The evil, therefore, as it already exists in connexion with gratuitous, cannot be supposed to take its rise from Provident Dispensaries.

(b) Again, I am led to believe that so far from injuring General Practitioners, they will diminish certainly their amount of labour, but increase their real profit. Here I speak from what conversation I have had on this subject with General Practitioners themselves. Owing to the wholesale system of gratuitous relief now afforded to the poor, they are often, it is feared, led to believe that medical men need no remuneration. They are sufficiently paid by the amount of information derived by practice among them. Many, therefore, seem to believe they have a free right to the professional assistance of medical men. They demand it, often requiring also medicines, and giving a great deal of trouble, but never paying for either, or, what is more, ever having had the intention of doing so.

(c) It will do them good, by indirectly discouraging quackery. It is well known that chemists and druggists very frequently, if not invariably, prescribe. There is this difference, however, they give no credit, and for their medicines they obtain at once the remuneration. To them, in most cases, do the working classes first refer, till they have expended all their ready money. Then they call in the medical man, who gives the credit, but who, in most instances, is never paid. Any measure, therefore, which, in its effect, will bring back remuneration for advice, in its legitimate domain, cannot fail to do them good.

(d) Again, it is not the intention of these Dispensaries to give medical relief, except to those who shall be found, on inquiry, to be without the means of paying for a regular medical attendant. It is hoped that a distinction being made in the colour of the ticket, many now obtaining gratuitous medical advice may be induced to pay for it in part; which, generally, through the force of example instilling in the minds of the working classes a more healthy honest feeling, the demoralizing tendency may be checked, and many who have the means will be shamed into seeking and paying for the assistance of a regular medical attendant.

The principle of the plan I ventured to suggest is the following:

1st. That a number of blue letters be left in the care of the resident Medical Officer at the dispensary house, which he shall be allowed to sell to poor persons requiring them, at 2s. 6d. each, on presentation of a recommendation signed by a clergyman or respectable householder, certifying that their pecuniary circumstances are such, that they are unable to pay for a regular Medical attendant.

2nd. Such letters to be available for one month from the date of presentation at the dispensary.

3rd. Patients presenting these letters to be entitled to priority of attendance.

II. With the view of discouraging the abuse of midwifery patients in particular, and ignorant midwives, that blue lying-in letters be also left with the resident Medical Officer, for purchase under the same restrictions, at a price of 5s. each letter, the accoucheur pledging himself that such patients shall be attended only by regularly qualified Medical students or midwives.

III. That, agreeably to Dr. Stewart's suggestion, subscriptions less than the guinea, from 2s. 6d. upwards, be received, and ordinary letters given for these at the rate of 2s. 6d. each letter, for distribution by the better order of master-workmen and mechanics to their under workmen and poorer neighbours, such parties to have their names inserted in a separate list, but not to have any voice in the management of the charity.

Such, Mr. Editor, are the principles of a plan I would venture to suggest. Without insisting especially on the details, which may require modification, I believe they would, in their working, correct many existing abuses, and more than double or treble the annual receipts of many dispensaries, thus affording the Committees of Management an opportunity to give their Medical Officers some more tangible proof of their approbation than the simple thanks usually given in their Reports, which, however gratifying, are certainly not remunerative; the whole affording a most cheering and pleasing result, not only to the Committees, Governors, or Medical Officers, but in its working and success, calling forth the universal commendation and support of those who have really at heart the moral and social improvement of the poor.

I have the honour to be, Sir,
Your obedient servant,
C. H. F. Routh, M.D.,
Physician to the St. Pancras
Royal General Dispensary.

19, Dorset-square, April 15, 1850.

THE COLLEGE OF PHYSICIANS.

[To the Editor of the Medical Times.]

Sir,—It has been well said that our Profession is now in a transition state, and this applies to its theory, its practice, its politics, and its economy.

The time-honoured Apothecary must in name, we are told, be discarded; he must be rounded off into the general Medical attendant, who, having some good or bad M.D. degree, to be used *pro re natâ*, can, when circumstances make it desirable, cease to dispense, and sign and practise as a Physician only.

Such is the course into which our Profession now is working a broad channel. Such is the result of the London University and of railways to Aberdeen and Giessen.

The direction which the Profession is visibly taking may tend to good or to evil. At present it is manifestly leading to confusion, and, therefore, to all that is bad.

By the College of Physicians alone can this movement be converted into order and into good.

You have already, Sir, indicated the course which might be followed by those in authority at the College of Physicians. It might, perhaps, be more plainly stated thus:—Instead of the present elect Fellows and Licentiates of the College of Physicians, let them, by a new Charter, have the power of granting Degrees in Medicine, and let the license of the College of Physicians be given to every one who passes the required examination, whether he dispenses medicine or not.

Let there be a second examination for the Fellowship, and let not the Doctor's Degree be granted to any one until he has passed this examination; but let no one who dispenses medicine be eligible for the Fellowship.

After forty-six years of age let the Fellowship and Degree be granted, without examination, to any Licentiate who is willing to cease dispensing medicine.

Instead of the elects being self-elected, let them be elected in greater number by the Fellows, and let the affairs of the College be managed by the elected Fellows.

By such a Charter, a union of the Physicians and General Practitioners would be effected. The College of Physicians would become the College of General Practitioners; and let not the name be despised, for this is, in fact, if not in name, the position which each individual Physician will be compelled, in the course of a few years, to take, unless he wishes to die of something very closely resembling slow starvation.

That troubles and difficulties are opposed to the entrance of the College of Physicians on this course I see very plainly; but it is still more clearly evident, that this course leads the College again to that position which it once held, and which it is yet once more permitted the opportunity to regain.

Yours. &c.,
M. D.

[To the Editor of the Medical Times.]

Sir,—In due deference to your editorial authority, I am not at all convinced by your arguments, that the College of Physicians in London has not the power of conferring the title of M.D. on those gentlemen, who, having been Medical Practitioners of standing and respectability, but not being the fortunate possessors of an University degree, have, upon examination, obtained its license to practice as physicians. But, let us advert to the terms of the license:—"Et ei concessisse liberam facultatem et licentiam tam docendi quam exercendi scientiam et artem medicam, eidemque summis honoribus et titulis et privilegiis quæcumque hic vel alibi medicis concedi solent"—"Have granted him free power and license to *teach*, as well as to practise the science and art of medicine, and *with all the honours, titles, and privileges which* HERE *or* ELSEWHERE *are wont to be granted to physicians.*"

Now, these words do convey to my mind most conclusively the impression, that he who has received this license, has also the *right* to assume the title of M.D. With regard to the "wisdom of the regulation;" or "its infringement of the original Charter of the College;" or its presumed effect in "compromising the rights and privileges of the Universities," I have nothing at all to do; but I do protest against the assertion, that I have "no more claim to that title than Licentiates of the Apothecaries' Company, or of the Pharmaceutical Society."

In reference to your statement, that the Universities alone can make doctors, I beg to remind you, that the Archbishop of Canterbury possesses, or did formerly possess, this privilege.

I remain, Sir, your obedient servant,
M.D.

April 18, 1850. Extra-Urbem.

[The suggestions offered in the foregoing letter evince a liberal spirit, and invite further consideration. They present one means of settling the differences of opinion that now disturb the Profession.—Ed. *Med. Times.*]

[To the Editor of the Medical Times.]

Sir,—Respecting the powers of the Royal College of Physicians to confer the title of Doctor, I must again beg leave to refer you to the diploma granted to those who have passed their examination, and to that particular part which I before quoted, viz., "*eidemque summis honoribus et titulis et privilegiis.*" Now, these words must either mean something or nothing. If I have misconstrued them, will you be kind enough to expound? But, what says the College through its amiable registrar, Dr. F. Hawkins, December 22, 1838? "And, as the College trusts that, by a faithful discharge of its own duty, it can promise itself the satisfaction of thus continuing to admit into the order of English physicians, a body of men who shall do it honour by their qualifications, both general and professional, *it is prepared to regard in the same light, and address by the same appellation, all who have obtained its diploma, whether they have graduated elsewhere or not.*" This is plain English, and would appear to be conclusive on the subject. Whether the College have or have not the power of doing legally what they say they will do, is another subject, and which I think will puzzle some of the most astute lawyers of the day to decide. Such being my opinion, I will not presume to attack its charters forensically back to Henry VIII.; but I will rest contented with the dictum and honour of the College which confers the diploma in which the above quotation occurs.

I admit, as I did in my last, that the College cannot grant the University degree of M.D. (*gradus.*) But I still insist that the title of Doctor is conceded to its Licentiates; and, without any other degree, they have the *privilege* of signing after their names M.D., Doctor of Physic. Without these honour-

able distinctions, what would the physician possess more than the mere apothecary?

You say, the only privileges the College can give are the right "to practise as a physician in London," &c. Why, the common law of the land gives to every man a right to practise in any profession or business in which he is competent.

Dr. Hawkins further states, in the same manifesto from which I have quoted above, "The College feels confident that it has over-stepped neither the spirit nor letter of the laws which have invested it with the power of governing and legislating for the whole faculty of medicine within its jurisdiction, by thus earnestly endeavouring to maintain its character and reputation, and vindicate its claim to be the source of professional honour."

Your obedient servant,

April 22. Ιατρος.

PERFORATION OF THE STOMACH.

[To the Editor of the Medical Times.]

SIR,—If you think the following case of sufficient interest for insertion in your valuable periodical, it is quite at your disposal. On reference to page 57, Vol. XVII., of the *Medical Times*, I find a very similar case related by the then Editor of the *Medical Times*.

On the evening of the 19th inst., I was requested by an innkeeper of this town to visit his female servant, aged 20, who was stated to be dying. On going to the house I found her in a complete state of prostration, the pulse having entirely ceased at the wrists, and the surface of the body become cold. She complained of great pain of the abdomen, which was tense and tender on pressure. She had been seized suddenly, at half-past eight o'clock in the morning, with excruciating pain in the stomach, succeeded very soon afterwards by great depression of the vital powers, repeated retchings, without, however, being able to expel anything from the stomach, and intense thirst. As I have stated above, I did not see her until she was moribund; her mistress having tried various domestic remedies in the meantime. The poor girl died at nine o'clock in the evening.

As the case appeared to me to be sufficiently important, and not altogether devoid of suspicion, since many of the symptoms were similar to those presenting themselves after metallic poisoning, I suggested the propriety of an inquest, and, having received the Coroner's warrant for that purpose, I made a *post-mortem* examination. On making an incision into the abdomen, I found an accumulation of several pints of watery fluid, pretty deeply tinged with bile; and having removed this with the sponge, and disengaged the cardiac extremity of the stomach from the œsophagus, I immediately found a perfectly circular and smooth perforation of the stomach, having a diameter of half an inch, which at once accounted for every symptom.(a) On slitting open the stomach, I found the mucous coat absorbed to the extent of nearly an inch round the perforation, and the muscular structure under the abraded part very much developed and thickened; so that it would appear to have resisted, for a long period, the ulcerative process which had been going on in the mucous coat above it. The stomach, otherwise, was perfectly healthy, as were also the whole of the other viscera. There were very faint traces of recent inflammatory action of the investing membrane of the bowels, as I conceive that the shock to the nervous system from the rupture was too severe to allow reaction to take place to any extent. From inquiries after the death of the girl, I learned from her mistress, that she had complained for several months of pain at the stomach soon after taking food, but had never suffered from vomiting, which was in some measure accounted for by the situation of the diseased part.

JOHN PEARSON.

Stalybridge, April 23, 1850.

THE LAWS OF ENGLAND, *versus* THE COUNCIL OF THE COLLEGE OF SURGEONS.

[To the Editor of the Medical Times.]

SIR,—There is a very important anomaly in our position as members of the College of Surgeons, which I consider has not been sufficiently commented on. Perhaps the following remarks will tend to bring it more prominently forward.

The laws of England consider, and, no doubt, have a just right to do so, that every member of the College is qualified and competent to treat, not only the ordinary cases of surgery that may come under his care, but *all cases* that may happen in the course of his practice; and, should a charge of that practice be brought against him, and a verdict of guilty recorded, a jury would have no hesitation in awarding heavy damages, and the judge would approve of such a verdict.

The President and Council of the College, on the other hand, regard all members of their body as only qualified to meet ordinary cases of surgery, although their diploma states nothing of the kind; and this, their opinion, has been carefully kept behind the scenes till the last few years, when it has, apparently, answered their purpose to reveal it.

It appears, therefore, that either the laws of England are too exacting in requiring that the people, whether in town or country,—whether attended by a Fellow or a member, shall be skilfully, or, at any rate, efficiently treated; or,

That the President and Council of the College have not done their duty by their members, in purposely allowing them to pass with such slight examination, (as far as they are concerned,) to unfit them for the duties of their Profession.

There can be no doubt, by any reasonable being, that the latter position is the correct one, and that the governing body of the College has not been true, either to its members generally or to the public.

Let me suppose a case:—A member of the College is placed in Court for malpractice, and the unfortunate case, we may suppose, was not an ordinary one. Instead of calling upon such Hospital surgeons as he may know to give testimony to his professional character and attainments, I think he might subpœna, as a witness, the President of the College, whether it happened to be Sir Benjamin Brodie or Mr. Green, and call upon him, in open Court and before his countrymen, to declare that this their member was not guilty or culpable, inasmuch as they never examined him for, or wished him to fit for, anything but ordinary cases of surgery, and that the diploma of the College was not a certificate of qualification such as it had usually been considered by its members and the public to be, but only such in a very qualified sense. That he and the Council had considered the former qualification required of members too high for the honour, advancement, or usefulness of Surgery, bringing the mass of members too much into collision with the Fellows of the College, and that, consequently, they had reduced the age at which the examination for membership should take place, from the twenty-second to the twenty-first year of age. In fact, that the science and practice of Surgery would advance in proportion as the gulf between the Fellows and members was made wide by the imperfect education of the latter.

Would such evidence be listened to for a moment? Would it not call down the indignation of all present? and would not the Judge feel himself imperatively called upon to represent to this President that the College had not fulfilled the expectations of the country in not having sent forth its members fully qualified to practise their profession?

Lastly,—Would not such a scene much startle Medical students, and make them hesitate ere they paid their money for a diploma in this College, the officials of which, in the day of trial, if they spoke what they thought, would give their evidence against the competency of any gentleman holding their diploma of membership.

Yours, with much respect,

A MEMBER OF TWENTY-FIVE YEARS' STANDING.

ON THE ADMINISTRATION OF CHLOROFORM AND CASTOR OIL.

[To the Editor of the Medical Times.]

SIR,—There is nothing new in the external use of chloroform in neuralgia. Mr. Wilde, of Dublin, has so applied it with great success. His method is, not to put it upon linen, but upon a piece of spongio-pilline coated externally with india-rubber, thus preventing evaporation, and confining its action more strictly and effectually to the part. At Mr. Wilde's suggestion I have also used it. When first applied, it causes, as Mr. Barron states, a burning sensation by no means pleasant; but this shortly subsides into rather an agreeable warmth, and the pain begins to dull in a few minutes, nearly or quite ceasing. The skin is much reddened by its use for a short time afterwards. There is no sort of objection to its employment in the case of the most delicate person; but it has the disadvantage of partially losing its effect on repetition, like all other local remedies in such cases. This can only be obviated by constantly alternating its use with something else, such as tincture of opium, or hyoscyamus in hot water, ʒj. to ʒij.; lotions made with extract of conium or belladonna, smearing with extract of belladonna or veratrine ointment, or a morphia lotion, 2 grs. to ʒj. Ether might be tried in the same manner as chloroform. I find anodyne lotions most effectual when applied very hot; and the mere application of great heat or cold by means of water, often gives relief; but it is obvious enough, that all these things are only palliatives, and merely play a subordinate part to our constitutional remedies.

I beg to subjoin a useful method of administering castor-oil to very delicate persons, who cannot be induced to take it in the ordinary manner. Measure out the oil in a graduated 6 oz. stoppered-bottle, with a very wide mouth; add ʒss., or ʒj. of some aromatic spirit and water, in the proportion of 6 or 7 parts to 8 of oil. When administered, the bottle is to be smartly shaken, and the contents poured suddenly out into a large wine-glass and instantly swallowed. If the mouth and throat are then directly washed out with tincture of gentian or myrrh, mixed with water, ʒj. to ʒij., very little disagreeable taste is felt. By attention to these trifling details I have succeeded in inducing persons, who would not even hear of castor-oil if taken in the ordinary way, to take it habitually: a result often of no slight importance; and yet, as most of those engaged in private practice can testify, by no means easy to attain with delicate and fastidious patients.

I am, Sir, your obedient servant,

WILLIAM E. C. NOUSSE,
Member of the Royal College of Surgeons.

London, April 23, 1850.

FILLING UP DECAYED TEETH.

[To the Editor of the Medical Times.]

SIR,—Having seen an article in your Journal of the 21st inst., from C. Stokes, Esq., in reference to the formation of a cavity through the filling of a tooth for the exudation of matter, I beg to state, that I have been in the habit for some years of following a somewhat similar practice in such cases, viz. when the tooth is capable of being filled with gold, I insert a gold tube adapted to the nervous cavity previous to commencing the operation of filling, and then complete the operation in the usual manner, thus leaving an open channel for the escape of any matter that may form. By this means a tooth may be perfectly filled without the solidity of such filling being interfered with, which might frequently occur, if the operation of drilling was performed after the tooth had been filled. The use of such tubes is equally practicable in their application to fillings with cement. Trusting that this fact will be found useful to the Profession, in preventing the occurrence of such painful cases as that given by Mr. Stokes,

I am, Sir, yours respectfully,

M. LOMAX.

79, Mosley-street, Manchester,
April 22, 1850.

HEALTH OF LONDON DURING THE WEEK ENDING APRIL 20.

The return for the week ending last Saturday, exhibits a further decrease in the mortality. During the two previous weeks, the deaths registered in the Metropolitan districts were in succession 1124, 893; they have now declined to 866. In the corresponding weeks of 10 previous years (1840-9) the average number was 937, which being raised in the ratio of probable increase of population, becomes 1022; compared with which the number now returned shows a decrease of 156. In the same week of last year, before cholera became predominant, the deaths were 1089; the mean temperature, which was then unusually depressed, was lower than in last week by 12°. Last week, the deaths of 9 children and 2 adults were registered from small-pox, (of which 3 occurred in the Small-pox Hospital, Camden-Town,) indicating rather an increase in the disease, though it has not yet quite attained the average. 22 persons, of whom about half were children, died of diarrhœa and dysentery; this number is double the

(a) This perforation was seated at about 1½ inches from the cardiac extremity, and towards the larger curvature of the viscus.

average, and also exhibits an increase on each of the three weeks immediately preceding. At 8 Jeff's-place, St. John, Marylebone, on the 13th of April, the daughter of a coachmaker, aged 16 years, "chorea;" on the 17th April, at the London Hospital, to which she had been brought from Stepney, a female servant aged 19, died of "chorea." It is worthy of remark, that 9 deaths have been registered in London from this cause during the last ten weeks, which is nearly double the number that usually occur in a year. Amongst diseases of the respiratory organs, pneumonia and asthma now show a decrease; bronchitis has also declined, if compared with the amount of corresponding weeks in the last three years, but is still in excess, in comparison with the mortality of the seven previous years.

The deaths in the several hospitals of London occurred as follow:—

GENERAL.		Sussex & Brandenburgh-house (Fulham)	0
St. George	1	Northumberland-house	0
Westminster	0	Whitmore House	0
Grey Coat Hospital	0	Pembroke House	0
Charing-cross	1	St. Luke	0
Middlesex	2	Miles'	4
University College	0	Warburton's	3
Royal Free Hospital	4	Lunatic Asylum, Bow	1
King's College	3	Bethlem	3
St. Luke, City-road	0	Lunatic Asylum, Brixton	6
St. Bartholomew	11	Retreat, Clapham	0
London	5	York House, Battersea	0
Guy's	2	New County, Wandsworth	3
St. Thomas	8	Peckham House	0
Bethlem, London-road	0	Camberwell House	0
FOR CONVICTS.		LYING-IN.	
Hospital Ship, Unité	0	Queen Charlotte's	2
Penitentiary Hospital, Millbank	0	British	0
MILITARY AND NAVAL.		City of London	0
Royal Hospital, Chelsea (South)	2	Hospital, York road, Waterloo 2nd part	0
Royal Hospital, Greenwich (East)	4	FOR PARTICULAR CLASSES.	
Royal Military Asylum	0	Female Servant Invalid Asy., Stoke Newington	0
Coldstream Guards Hos.	0	German Hospital	0
Grenadier Guards' Hospital	0	French Hospital	0
Scots Fusilier Guards	0	Portuguese Jews' Hospital	0
Royal Ordnance	2	German Jews' Hospital	0
Dreadnought Ship	2	FOR SPECIAL DISEASES.	
LUNATIC.		Small Pox	3
Kensington House	0	Fever Hospital	1
Munster-house (Fulham)	0	Lock	0
Normand-house (Fulham)	0	Consumption, Brompton	1
Otto-house (Fulham)	0	Opthalmic, Charing Cross	0
Blacklands-house	0		

TOTAL, 68.

MORTALITY TABLE.

Deaths in the Week ending Saturday, April 20, 1850.

(Metropolis.)

CAUSES OF DEATH.	Total.	Average of Ten Weeks.
ALL CAUSES	866	936
SPECIFIED CAUSES	860	930
Zymotic (or Epidemic, Endemic, and Contagious) Diseases	171	169
SPORADIC DISEASES:		
Dropsy, Cancer and other Diseases of uncertain or variable seat	55	54
Tubercular Diseases	161	206
Diseases of the Brain, Spinal Marrow, Nerves, and Senses	113	116
Diseases of the Heart and Blood-vessels	34	28
Diseases of the Lungs, and of the other Organs of Respiration	141	143
Diseases of the Stomach, Liver, and other Organs of Digestion	44	56
Diseases of the Kidneys, &c.	12	9
Childbirth, Diseases of the Uterus, &c.	9	11
Rheumatism, Diseases of the Bones, Joints &c.	7	8
Diseases of the Skin, Cellular Tissue, &c.	1	1
Malformations	4	1
Premature Birth and Debility	20	20
Atrophy	14	13
Age	42	57
Sudden	15	10
Violence, Privation, Cold, and Intemperance	17	24
Causes not Specified	6	6

The following is the number of Deaths occurring from some of the more important special causes:—

Apoplexy	28	Heart	30	Phthisis	122
Bronchitis	56	Hooping-cough	36	Pneumonia	64
Cholera		Hydrocephalus	22	Scarlatina	19
Childbirth	3	Influenza	3	Small-pox	11
Convulsions	35	Liver	4	Stomach	4
Diarrhœa	19	Lungs	5	Teething	9
Dropsy	17	Measles	17	Typhus	35
Erysipelas	8	Paralysis	16	Uterus	4

BIRTHS AND DEATHS.

	Births.	Deaths.	Births over Deaths.
Males	755	434	321
Females	716	432	284
Total	1471	866	605

METEOROLOGY OF THE WEEK.

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Mean
Electricity.*	Nothing was shown at any examination.	Nothing was shown throughout the day.	Nothing was shown throughout the day.	Nothing was shown throughout the day.	Positive, and tension strong between noon and 3 p.m.	Positive, and negative between noon and 3 p.m.	N. and P. during the squall at 1 p.m. There were frequent sparks and galvanic currents.	
Rain in Inches.	0·10		0·50	0·03	0·01	0·15	0 31	sum 1·10
Amount of Horizontal Movement of the Air.	Miles. 50	170	380	105	10	230	155	sum 1100
General Direction of Wind.	P.M. Calm.	S.	S.W.	S.W.	W.	S.W.	S.W.	
	A.M. N.	S.E.	S.	S.W.	S.W.	S.S.W.	S.W. & W.	
Difference between the Mean Temperature of the day and the same day on an average of 7 years.	+ 2·7	+ 2·8	+ 0 8	+ 5·5	+ 5·0	+ 1·4	+ 2·1	+ 2·9
Ditto. Dew Point.	44·3	45·8	44·6	42·3	40·1	43·6	41·5	43·6
Mean of Thermometer. Dry.	47·4	48·0	46·4	51·5	51·4	48·9	49·8	49·9
Mean of Barometer.	29·718	29·244	29·018	29·454	29·828	29·832	29·434	29·504

* In this Column, A. stands for Active; N. for Negative; and P. for Positive.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS.—The following gentlemen having undergone the necessary examinations for the diploma, were admitted members of the College at the meeting of the Court of Examiners on the 19th inst.:—Messrs. Patrick Culhane, Glin, Limerick; Alfred William Moor, Pimlico; Jephson Potter, Manchester; Howell Walter Voss, Swansea, South Wales; William Prater, Exeter; John Edwin Cathcart, Hon. East India Company's Service, Bengal; John Errington Forster, Newcastle-upon-Tyne; John Clark, Derby; Edward Adolphus Brown, Chelmsford; Isaac Coggins, Lower Hayford, Oxfordshire; William Hewett, Reading, Berkshire; James Jeken, Dover; John Watkins, Hon. East India Company's Service, Calcutta; and Frederick John Dyer, Blackheath.

MILITARY APPOINTMENTS.—8th Foot.—Assistant-Surgeon Henry Day Fowler, from the 79th Foot, to be Assistant-Surgeon vice Ffennell, who exchanges. 79th Foot.—Assistant-Surgeon James R. Ffennell to be Assistant-Surgeon vice Fowler, who exchanges. Cumberland Regiment of Militia.—Thomas Mitchell to be surgeon. 73rd Foot—Assist.-Surgeon John Fraser, from the Hospital Staff, to be Assist.-Surgeon, vice Buckler, who resigns; 91st Foot—Assist.-Surgeon Richard Speir Peile, from the Hospital Staff, to be Assist.-Surgeon, vice Munro, appointed on the Staff. Hospital Staff—Assist.-Surgeon W. Monro, M.D., from the 91st Foot, to be Assist.-Surgeon to the Forces, vice Fraser, appointed to the 73rd Foot; Acting Assist.-Surgeon Robert M'Gregor, to be Assist.-Surgeon to the Forces, vice Peile, appointed to the 91st Foot.

NAVAL APPOINTMENTS.—Assist.-Surgeon James M. E. Wallace, Acting Assist.-Surgeon, (1849,) confirmed to the Wellesley; Francis C. Sibbald, M.D., (1846,) confirmed to the Adelaide; Thomas W. Rimel, (1844,) confirmed to the Wellington; Assist.-Surgeon Charles Ede, (1845,) to the Assistance, fitting at Woolwich for the Arctic expedition; Assist.-Surgeon James Wade, (1844,) to the Resistance, troop-ship at Sheerness.

OBITUARY.—On the 26th ult., Dr. B. Healy, for nearly fifty years a practitioner in Dublin. On the 10th, at Brighton, W. W. Stafford, Esq., surgeon, aged 50.—On the 24th of February, at London, Canada West, Charles Poole, M.D., aged 47.—On the 13th instant, at Lauriston-place, Thomas Alexander, jun., surgeon.—At Morningside, on the 9th, James Gorrie, Esq., surgeon.—At Selkirk, on the 7th, Thomas Anderson, Esq., surgeon.—On board the Indus, of apoplexy, on the 10th instant, Dr. Macdonald, of the Madras service.—On the 21st, at Ratcliff, Allan Cleland, Esq., surgeon.—On the 10th, at Pisa, Henry Harrington, M.D.

ASSISTANT-SURGEONS ON BOARD THE APOLLO.—The "Naval Intelligence," published on the 19th inst., contains the following paragraph respecting the Apollo troop-ship, in which the cholera broke out, and proved very fatal:—"Five supernumerary Assist.-Surgeons were thrust into the midshipmen's berth, already too small, and those gentlemen, one of whom has been ten years in the service, were obliged to sleep and to perform all the operations of their toilet on the troop-deck, in the space between the women and the soldiers, and in view of both." Will the First Lord say this ought not to be altered?

BENEFICENCE.—The Duke and Duchess of Norfolk have contributed the munificent sum of one hundred and twenty guineas, in aid of the funds of the Verral Spinal Hospital, for the treatment of deformities.

ANOTHER CASE OF MURDER BY CAUSING ABORTION has been discovered in Nottingham. The perpetrator has, it is said, made her escape.

EXTRAORDINARY OCCURRENCE.—The *Fayetville Carolinian*, of March 9th, describes a singular occurrence reported to have happened in North Carolina, on the authority of Mr. Clarkson. It states that on the 15th Feb. this year, there fell, within 100 yards of Mr. Clarkson's residence, in Sampson county, a shower of flesh and blood, about thirty feet wide, and, as far as it was traced, about 250 or 300 yards in length. The pieces appeared to be flesh, liver, lights, brains, and blood. Some of the blood ran on the leaves, apparently very fresh. During the time it was falling, there was a cloud over head, having a red appearance, like a wind cloud. There was no rain.

M. BOUCHARDAT, chief apothecary to the Hôtel Dieu, Author of many valuable works on Materia Medica, and well known through his researches relative to diabetes, was elected, last week, member of the Academy of Medicine.

SUICIDE OF DR. BELL, AT CHELTENHAM.—We regret much having to announce the decease of a member of the Profession, Dr. Bell, by suicide, at Cheltenham. It appears that the deceased had for nine months manifested indications of suicidal monomania, and had been placed in Landywell-park Lunatic Asylum, but seeming occasionally more rational, was permitted from time to time to return home. On one of these occasions, he cut his throat with a table knife, so effectually that he divided all the tissues to the cervical vertebræ. He of course expired on the spot. The verdict at the inquest was to the effect that the deceased committed the act while labouring under temporary insanity.

SMALL-POX is said to be prevalent in St. Lucia, St. Christopher, and Mountserrat, West India islands. In the last-named locality the most appalling scenes of disease, destitution, and misery present themselves on every side. Cultivation has, in consequence, been almost entirely suspended.

MEDICAL MEN AT INQUESTS.—The Committee of Middlesex magistrates, appointed to investigate the county expenditure, with a view to its reduction, recommend that a medical man, with a salary, be appointed to make *post-mortem* examinations in cases of inquests. This is running directly counter to the Act of Parliament and to common sense, for it must be self-evident that the medical man who attended the deceased during life is the only proper person to investigate the appearances after death. There would have been more wisdom in the proposal, had they recommended that an operative chemist be appointed, with a salary, to make any chemical analysis that may be required, as the majority of medical men are unfitted, by their studies and pursuits, to carry

out such examinations with the delicacy and accuracy required, when the life of an accused person may be at stake.

THE MURDER OF DR. PACKMAN.—Dr. Webster, after a lengthened trial, has been found guilty of the murder of this unfortunate individual, and has been sentenced to death.

THE BRITISH ASSOCIATION.—The Town-council of Edinburgh, on the motion of Mr. Dick, have decided to subscribe 100*l.* towards the expenses of the British Association during their session in Edinburgh in August next. The Chamber of Commerce in that city has granted 20*l.* for the same purpose.

DR. ANDERSON OF SELKIRK.—The Scottish newspapers record the decease of Dr. Anderson of Selkirk, who, for nearly half a century, maintained the reputation of a skilful physician and surgeon. For many years he was chief magistrate of the burgh, and his acute and benevolent mind was ever striving to ameliorate the condition of those around him.

THE CHOLERA.—This formidable disease is reported to have re-appeared at Halberstadt with great virulence.

GLANDERS IN THE HUMAN BEING.—A decided and well-marked case of this formidable and incurable disease came under the notice of Dr. Paley and Mr. Kelly within the last week. Mr. Taylor, of the Goat Inn, near Deeping, a respectable farmer and publican, of remarkably stout and athletic frame, and proof (as he thought) against the invasion of any malady, accidentally pricked the index finger of the right hand three weeks since, but suffering no inconvenience from it at the time, and being little aware of the consequences he was incurring, went on grooming and attending to his horses as usual, two of which had been glandered for two years. Shortly afterwards he was taken ill with symptoms of low fever, and threatening an attack of delirium tremens, to which he was predisposed from occasionally indulging in fits of intemperance. The limbs became peculiarly painful to the touch, and the left leg put on all the appearance of erysipelatous inflammation, to which he was subject; but the real character of the disease did not manifest itself till ten days after the absorption of the virus, when the arm of the affected side, especially the legs and thighs, forehead and scalp, became covered with large bumps, called "farcy-buds," interspersed with numerous pustular eruptions resembling small-pox; the left eye also became inflamed and closed, and the left nostril began to discharge a thin, serous, opaque fluid, of a peculiarly offensive smell, not to be mistaken. It was at this stage that the medical attendants were apprised for the first time, in answer to their inquiry, of the nature of the injury to the finger and the state of the horses; and it was then that the pathology of the disease became at once evident. Low muttering delirium soon set in, the powers began to sink, and death happily and speedily put an end to this loathsome complaint, after twelve days' duration from the first seizure. It is a remarkable coincidence, that this disease should follow the same law in man as it does in the horse, as exemplified in the discharge from the left nostril, (which is invariably the case in the animal,) although the exciting cause in this instance commenced on the right side.—*Stamford Mercury.*

IMPORTANT CASE.—HYETT *v.* THE GUARDIANS OF THE CHELTENHAM UNION.—An important case, having reference to the remuneration allowed to Poor-law Union Medical Officers, was decided at the Gloucester Assizes, on Monday last, before Mr. Justice Patteson and a common jury. The plaintiff, Mr. Frederick Hyett, brought an action to recover 13*l.* 1s. 6d., a balance of account due to him for Medical services rendered to the sick poor of the Union. Mr. Alexander, Q.C., with Mr. Greaves, Q.C., and Mr. Browne, were for the plaintiff, and Mr. W. H. Cooke for the defendants. Mr. Alexander, in stating the case, said his client, a highly respectable Medical man, resident at Cheltenham, had been, for nine years, Medical Officer of District No. 1 of the Cheltenham Union, which district included the workhouse and a large portion of the poorer part of Cheltenham parish. His salary had been 80*l.* a-year, with extra allowances for operations and midwifery cases, which made the income amount to considerably more than that sum. In March, 1849, another Medical man was elected in the place of plaintiff, much to his surprise, as no complaint had ever been made against him. The newly-elected medical man was found to be disqualified, and a second election had to take place, when the plaintiff was again rejected for another. From the 25th of March, when Mr. Hyett's term of office expired, until his successor's appointment was confirmed on the 20th of April, the former attended to the pauper patients as usual, at the request of the guardians. For this twenty-five days' service at the workhouse, attending to 222 cases, he had charged one guinea a-day, which included medicines. The remainder of the charges, amounting to 33*l.* 1s. 6d. in all, were for attending to 307 out-of-door cases, and supplying medicines, some portion of the charge being for midwifery cases. The whole bill was about one shilling per head for the cases attended. The guardians refused to pay it; and after some correspondence with the Poor-law Board, who recommended payment, they offered 20*l.* to compromise the debt. The plaintiff refused to take it, except on account, and it was paid him without any other condition. He then brought an action for the balance in the County Court; but the defendants moved the cause, by *certiorari*, into this Court, on the ground, that the judge of the former Court, being a county magistrate, was, *ex officio*, a Poor-law Guardian, and hence, as one of the defendants, disqualified for trying the cause. In addition to putting the plaintiff to the expense of going to trial in this expensive way, the defendants had also compelled him to bring a clerk from the Poor-law Office, Somerset-house, to prove a copy of the letter sent by that body to the Guardians, as also an officer from the Apothecaries' Hall, to prove the seal of the Apothecaries' Company, of which the plaintiff was a Licentiate. In short, every obstacle was thrown in Mr. Hyett's way in endeavouring to press his just claim to a settlement. It had often been said, that the Corporations had no souls; but, in this instance, it might be said, they had no sense, or they would not go to law in such a case as this. He called the following witnesses to prove the case:—Mr. William Porter, Master of the Union, proved the services rendered by the plaintiff. Witness had his instructions to send for Mr. Hyett from the Guardians. Mr. Edward Mentz, a clerk in the office of the Poor-law Board, Somerset-house, produced a copy of Mr. Lumley's letter to the Guardians, recommending them to discharge Mr. Hyett's claim for extra services, those services having been rendered without stipulation or contract. Mr. Alfred Harper, a reporter, proved that he attended the Board of Guardians on the 5th of July last, and heard the original letter read, of which he had made a copy. Mr. James Boodle, solicitor, proved, that the Judge of the County Court was willing to try the cause, after the objection raised by the solicitor for the defendants, and also that he had received 20*l.* on account of the plaintiff's claim, from the clerk to the Board of Guardians. Mr. William Henry Maunder was called to prove the seal of the Apothecaries' Company to the certificate of Mr. Hyett. This was admitted by Mr. Cooke, without swearing the witness. Mr. John William Wilton, Senior Surgeon to the Gloucester Infirmary was called, and deposed to his knowledge of the plaintiff as a respectable Practitioner at Cheltenham, and that the charges made by him were very moderate in amount for the services rendered. Dr. Wright, of Cheltenham, gave similar evidence; and further deposed, that he had been himself a Poor-law Guardian in Cheltenham, and knew the plaintiff to be for years a very valuable officer. His treatment of the poor was excellent. This was the plaintiff's case. Mr. Cooke then argued, at some length, in favour of a non-suit, contending, that the plaintiff could not sue the defendants, who were in the position of a Corporate body, except on a contract in writing, and under seal. That point had been decided at the last York Assizes by Mr. Baron Alderson, in the case against the Guardians of the Huddersfield Union. He could not quote this with any authority, as it has not yet appeared in an authorised publication. The Court overruled the objection, stating, that Mr. Cooke should have leave to move for a non-suit at the close of the case, if the verdict should go against his clients. Mr Cooke then addressed the jury, contending the plaintiff was amply paid for his services by the payment of 20*l.*, his former salary and extent of services considered. He said, he was not instructed to impute the slightest blame or want of ability to the plaintiff; but, he submitted, his clients were bound to resist this unjust demand, as guardians of the public purse. His Lordship summed up, directing the jury to find for the plaintiff, if they thought the charges reasonable for the services rendered, because his previous contract with the Guardians could not influence their decision. They should simply look at Mr. Hyett as an ordinary Medical man, called in for twenty-five days' medical attendance on the sick poor, in which case he would, of course, be justified in charging more than if the engagement were permanent and annual. The jury, after a brief consultation, found a verdict for the plaintiff, for the full amount claimed. The costs in this case are expected to be very heavy.

TO CORRESPONDENTS.

"M.D., Extra-Urbem," must excuse us that we have omitted that part of his letter which appears to us to be irrelevant and altogether gratuitous. We assure him, we merely endeavour to call things by their right names.

"An Old Student of University College."—In the present state of affairs at University College, we do not deem it advisable, either for the interests of that Institution, or for the interests of the public as connected with it, to insert our Correspondent's communication. We understand a Committee of investigation has been appointed, on whose honour and honesty we confidently rely.

"Moxa."—We were not aware of the transactions between —— and ——. But the information is useless to us. We conceive the public sayings and doings of public men to be public property, and, as such, open to discussion and comment. But far be it from us to condescend to investigate the private affairs of any man, however much we may politically and professionally be opposed to him; or, even for a moment, to draw aside the curtain that conceals from public gaze either his private foibles or his private failings.

"Ignotus, Bangor."—We agree with our Correspondent. Temperament is too much lost sight of in medicine. Those best marked, we believe, are, the sanguine and the melancholic, well described by Cullen. The phlegmatic is a modification of the former; the nervous has been lately added. In a work of Combe's he will see excellent engravings, coloured, representing the thing.

"M. N., Bruges."—The spermatozoon fructifies the ovum (Bischoff says) by a sort of catalytic force. "Hybridism," as a general rule, is brought about by the interference of man; and late microscopic researches show that, in such cases, the spermatozoa disappear. The most important fact relative to the point in debate, however, is, that spermatozoa in their chemical composition, belong to the same class of animal bodies as epithelial cells, not new animals, as our Correspondent thinks. They contain a large amount of phosphorus and phosphates, and Mulder's deutoxide of protein.

"A. B., Bath."—Teratology means the doctrine of congenital deformities. 2. The museum at Guy's has, perhaps, the best collection of wax representations of skin diseases in London; far better than the celebrated Ecole de Médicin, in Paris. 3. Monsters are generally accounted for by arrest of development; many occur in the median line—ectopia, hare-lip, &c., where we know the formative process is last perfected. Others look like reduplications, two ova, it is now well known, being often formed from one graafian vesicle.

"K., Fleet street."—The prostate, Cowper's gland and vesiculæ seminales, must be considered as accessory to the generative function, not essential. The sinus pocularis of the prostate has been supposed by anatomists to be the homologous organ to the uterus in the female. Weber calls it a rudimentary uterus. Huschke, that it always contains spermatozoa, as the female uterus ova. He even describes a transverse os tincæ; its development in the lower animals is in the inverse ratio of the development of the vesiculæ seminales.

"H. K., Dublin."—We believe the last person who has tried galvanism in aneurism was M. Petrequin, who speaks highly of it. He uses a small battery of forty elements, charges it with sal ammoniac solution, and puts four needles into the tumour. In twenty minutes, he says, the solidification is perfect. The electricity of the machine should be avoided; and even acids in the pile. The action of the battery should be kept up between the different needles till a net of coagula is formed.

"Æger."—Copaichia Bark is a new bitter, analogous to cascarilla.

"X. Y. Z."—We believe it has been tried. Some others of the "Solaneæ" grafted on the potatoe, and the latter remain sound. 2. We never prescribe.

"Liebig, Cork."—We cannot say; but a curious fact, noticed, we believe, by Dessaignes, lately, may assist. He says he has all but succeeded in forming asparagine by synthesis. Ammonia acting on malic ether, if some one would only contrive to make the latter, would settle the question.

We never prescribe in this place. Our Correspondent at Manchester can be at no loss to find proper advice in that city.

"S. A. D."—Consult anybody rather than one of those who make such complaints their especial care. The nearest legitimate medical man will relieve you, and that without injury to body, mind, or purse.

"A Subscriber."—Not knowing, can't say.

"A. T."—There can be no question as to the justice of the complaints made on the subject; but our Correspondent must pardon us, that want of space forbid our going further into the subject at present.

"Mr. H. Smith," "On the Treatment of Stricture of the Urethra by Perineal Section," will receive early insertion in our columns.

"Mr. Haynes Walton's 10th "Lecture on Operative Ophthalmic Surgery," with its illustrative woodcuts, we hope to find room for next week.

Errata.—In Mr. Barron's paper on "Chloroform in Neuralgic Diseases," read "anæmic" for "aneuric." We have also to apologise to Dr. R. A. Sheldon, of Raphoe. In consequence of an oversight, his "Case of Intus-susception" went to press uncorrected.—Among the list of gentlemen who passed at the Aberdeen Graduation, inserted in our last, for "William Browne," read "William Briscoe."

Mr. Hyett must accept our apologies. The omission was unavoidable.

ORIGINAL LECTURES.

LECTURES
ON
OPERATIVE OPHTHALMIC SURGERY.
DELIVERED AT THE CENTRAL LONDON OPHTHALMIC HOSPITAL.

By H. HAYNES WALTON, Esq., F.R.C.S.,
Surgeon to the Hospital, and to the St. Pancras Royal General Dispensary.

LECTURE X.

ARTIFICIAL PUPIL.

(Continued from page 273.)

Closure of the Pupil, the Lens having been removed by extraction—Manner in which it is closed—Changes the iris undergoes—Alterations in the capacity of the Anterior Chamber—Operations of Incision, and Incision with Extension — Excision — Wenzel's Central Excision—Closure of the Pupil after the Operations of Displacement and Solution.

GENTLEMEN,—When the pupil is closed from iritis after extraction, it is shut up either by what appears to be a mere contraction of the circular fibres of the iris, whereby scarcely a trace of an opening is left, or in a more or less contracted state its margin is adherent to opaque capsule or is sealed up by lymph. In this, the simplest order of closed pupil, the iris is not altered in its position by the loss of communication between the chambers of the eye, provided its tonicity is preserved, and the anterior chamber is not only undiminished in size,—a matter of importance for operating,—but actually increased by the falling back of the iris.

The pupil is not unfrequently diminished and displaced by prolapsus of the iris; indeed, it may be wholly destroyed or lost, the portion of the iris in which it was situated having actually passed external to the cornea.

With prolapse there must always be a reduction in the size of the anterior chamber, the diminution depending on the position of the cornea, through which the iris has escaped.

The iris may so effectually recover from an attack of inflammation that has been sufficiently severe to close the pupil, that it shall not be possible to discern that its structure has been damaged by it; but that is rare, as it nearly always shows marked evidence of injury.

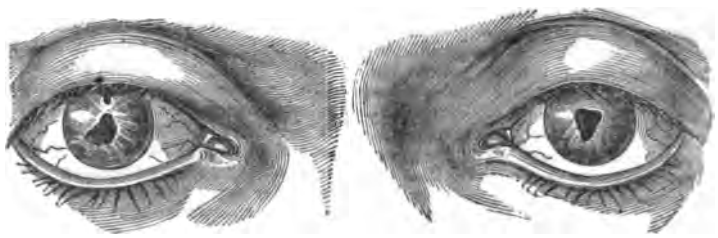
When the iris retains its physical properties,—which is equivalent to saying, When its structure is uninjured,—the suitable operation is "incision." My own method of operating is to divide the cornea with a knife of this shape, entering it about two lines from the sclerotica, and carrying it across the anterior chamber to the centre of the iris, through which I thrust it up to the shoulder of the blade. By this the iris is divided to a third of its diameter, which is quite sufficient. The aperture that results is elliptical; and, as I prefer a vertical to a horizontal direction, I introduce the knife on the outer side of the cornea. The steadying of the eye, the retracting of the lids, and the manner of holding the knife, are to be just as if "extraction" were to be the operation.

A great deal of stress is usually laid on the fitness of "incision" to cases where the iris is on the *stretch* from prolapsus: without going into the question of the greater elasticity or contractility of the iris under such circumstances; but, giving it as my opinion, that that property is much over-rated, I would say, that the choice of any operation, so far as the state of the iris can be taken as a guide, should be made to depend on its actual structural condition, because any advantage that the mere stretching could afford might be lost by slight structural change.

It is not often that cases are met with, to which incision is well-suited,—that is, in which it will be successful; because it is seldom that the iris possesses enough health to retract after it is divided, or to maintain patent a gap that had been at first ample. Then, when the pupil is closed by lymph or adherent to capsule, the iris can scarcely be sufficiently divided by mere "incision," or if divided would not, in all probability, contract, because of its adhesions to the capsule or to the lymph.

I propose to overcome these difficulties by the following operation, which I have put into execution on several occasions, and which I hope to test more fully as opportunities occur. With the knife I have just shown you, I penetrate the cornea as in "incision," and instead of cutting the iris in the centre, as in that operation, divide it a line or more internally, and then, with a blunt hook, draw outwards the outer lip, until a sufficient gap is made. It is, I suspect, partly by stretching, partly by tearing, and by the folding inwards of the outer lip, that the opening is made.

This sketch is from one of my patients, in whom two artificial pupils were made after this method. Both pupils had closed after the operation of "extraction." Tyrrell had performed on one eye and I on the other; both irises were discoloured, and puckered, and bulging.



I will digress a little to tell you, that here I yielded to a tempting opportunity to make two artificial pupils, expecting that there would be single vision; yet, although the pupils correspond, as nearly as it is possible to make false pupils agree, and the focal range of each eye is the same, and the globes are parallel, when both eyes are directed to an object he sees double. With either eye he can see without glasses to tell the hour by his watch. It is now more than a year since the operations were done, and double vision remains, but in a very much less degree than at first. He is learning to use one eye and to neglect the other.

Much stress is laid by authors on the necessity of dividing the circular fibres of the iris in "incision," under the idea that the opening will the better expand. I do not attach any value to it. Those fibres very rarely escape disorganisation. Even when the other parts of the iris seem to be healthy, the centre, or the site of the pupil, is discoloured and dull. I beg to draw your attention to the fact of my having made the pupil in the right eye in the centre of the iris as it then stood, the natural centre with the circular fibres being at the upper margin of the cornea, there having been considerable prolapsus of the iris.

The iris may bulge so much forwards at its circumference that the knife cannot be passed through the outer part of the cornea without wounding it immediately, then the entrance must be made at a more central part of the cornea, where the iris is usually least prominent.

I am averse to the introduction of new terms, but I venture to call the operation that I have been describing "incision with extension." Its advantages are, its applicability to cases in which "incision" alone would be unsuited, the division of the iris before the aqueous humour is lost, and, therefore, while it is tense, and by a cut which, from the construction of the knife, is made with such slight pressure, that there is no risk of separating it at its circumference, the superior size and position of the pupil, for if done according to my directions it will be large and central.

This operation, like all others in general and special surgery, requires discrimination in application. I will speak more of it as I proceed.

It was by incision, performed through the sclerotica, that artificial pupils were first made; Cheselden being the happy originator of it. After some years, his operation fell into disuse, but was revived by Sir W. Adams, who considered that by the use of a particular knife, and by the adoption of long incisions, he possessed the most perfect means for making a pupil under almost any circumstances. Adams's iris scalpel is well known, and is to be seen in nearly all the cases of eye instruments. We now have more suitable expedients adapted to the different states of the eye requiring a pupil, than those practised when Adams lived. Were I to judge of the result of his operations by his writings, and to take the cases he has published as a sample of his usual success, I should say, that nothing better could be desired, and that he left no room for improvement. No one was better acquainted than Adams, with the imperfections attaching to *his* operation, as he was wont to call it, and he gives, rather unexpectedly, I must confess, at page 281 of his last work, "Adams on the Eye," a true sketch of them.

There is another mode of incision which is done with a knife and a pair of scissors,—Maunoir's operation. The cornea is divided to a sufficient extent, a fourth or a third, according to its size, and with scissors (such as I have shown you, and known as Maunoir's) the iris is divided. They should be introduced side-wise, and when the points are opposite the spots at which the incision is to commence, slightly turned, the blades opened, the iris pierced with the sharp-pointed limb and the instrument carried on in the desired direction till it has reached sufficiently far—which will be indicated by the blunted limb that traverses the anterior chamber—when the iris is to be divided. A simple cut may suffice, just as a simple division with the knife; but more usually it is necessary to make a flap in the iris, by the contraction of which a sufficient opening is made, and the more acute the angle of division the better. This diagram will show what I mean:—

The iris may have undergone such changes from inflammation, or from peculiar adhesions to the capsule, that a patent aperture cannot be made in it by the means I have described. It is necessary, then, to cut out a piece, or, having incised the iris, to draw a portion out of the eye, and retain or strangulate it in the cut in the cornea. In the operation by excision or strangulation, I proceed just as if I were about to make a pupil by "incision and extension," except that I do not release the iris from the hook after a gap has been made, but draw the hook with the iris attached to it through the cut in the cornea. I may, or may not snip off the protruded part; I usually leave it alone to be separated by a natural process. This diagram shows the operation, which

was not, however, done in this case because the iris was too unhealthy for any other mode, but because the pupil in addition to being closed by a large piece of lymph, was so adherent to a dense capsule, that I could not establish an opening by cutting through the centre of them. As yet I had not done my operation. The capsule is seen adherent on the out side of the new pupil.

After an excellent pupil has been made you may discover, to your disappointment, that an opaque and uncontracted capsule renders it useless, by occupying the space between it and the vitreous

humour. You must endeavour to remove it by extraction, and, if that fail, try to push it aside.

The old operation by "excision" I need not describe. It used to be applied to a particularstate of diseased eye to which I have not yet come, and for which something better has been devised. Wenzel's "central excision" has apparently fallen into disuse. I have neither practised it, nor seen it performed, yet I have a favourable opinion of it, and think it well adapted to cases where the iris bulges much or actually touches the cornea in every part, and the division of the cornea cannot be effected without at the same time wounding the iris. It is supposed that an eye so altered is, from general disorganisation, unfit for any operation. As a rule that is correct, but there are exceptions. I have lately seen such an one, that has been operated on by drilling, and useful sight, *i. e.*, as far as the patient was enabled to move about alone, was obtained. The argument advanced against Wenzel's operation is, that the cornea must be opened to an extent nearly equal to half its diameter, which is, in fact, little larger than that required for incision with the scissors. Its recommendation is its peculiar applicability to a certain description of case. To perform it you make a flap of the iris at the same time that you divide the cornea, a proceeding which is easy enough, and then cut off the flap. I suspect that it is the difficulty of executing the subsequent step, especially when there is a necessity for the use of forceps as well as scissors, which has brought it into disrepute, for there must always be a great obstacle to the performance, and great uncertainty in the result of an operation on an internal part of the eye when both hands of the operator are engaged about it, and the management of the lids and the steadying of the globe are necessarily entrusted to an assistant. But the flap need not be cut off, for without any difficulty the principle of "extension" may be applied to it. This I deduce from what Tyrrell says of the operation of "incision" with the scissors when it becomes necessary to make a triangular flap of the iris. (Page 516, Vol. II.) "The flap should be depressed towards the vitreous body by the extremity of the scissors, otherwise it may easily re-unite. I used formerly to take out a piece of the iris, but I afterwards found the above modification to answer exceedingly well." Here there may be means for rendering the operation more applicable.

I have little practical knowledge of closed pupil after the operation for displacement; but from the observation of others I find it is not as favourable for relief as the state we have been considering. Iritis after extraction must, I feel certain, be often caused from the great and forced distension of the pupil by the passage of the cataract through it, and certainly very frequently produced by the injury the iris receives from instruments, and then it is the seat or centre of the inflammation, the locality, so to speak, of its origin and of its intensity.

But iritis, consequent on displacement, can rarely be from direct injury to the iris, but a part of the inflammation which pervades generally the textures of the globe, as an immediate result of the operation, or of the slow and insidious inflammation produced by the irritation of the displaced cataract,—and in either instance injures all the structures alike. In this is to be found the difference. When we call to mind the frequent association of cataract with other unhealthy changes in the eye, we shall perceive how very likely displacement is to increase existing disease, or to develope it, where there is a predisposition to it.

When the pupil is closed after the operation for solution, and the cataract is absorbed, the eye is circumstanced just as if closure had followed extraction. When the cataract or part of it yet remains, the case comes under another head, which will be considered in my next and last lecture on this subject.

THE CHOLERA.—The *Times* reports the outbreak of this fearful pestilence in Castlecomer, in the county of Kilkenny, and in Bagenalstown, Carlow. In Castlecomer there have been five cases, three of which have ended fatally, one in recovery, and one under treatment. In Bagenalstown, there have been six cases, two fatal, and the rest under treatment at the date of the report. This disease has broken out in the Military Hospital at Havanna.

THE LUMLEIAN LECTURES FOR 1850.

DELIVERED AT THE ROYAL COLLEGE OF PHYSICIANS.

By R. B. TODD, M.D., F.R.S.

LECTURE I.

(Continued from page 313.)

Hysterical Delirium.—Not far removed from the epileptic delirium, is another form which occurs in aggravated states of hysteria, and which is well known to practical men as *hysterical delirium*, and which frequently assumes a chronic form, when it may be properly called Hysterical Mania.

The following sketch will, I think, embrace the leading particulars of the clinical history of this interesting malady.

A girl of hysterical constitution, has been somewhat out of health, without, it may be, any very prominent symptom, excepting perhaps headache. Her spirits are depressed more or less, and she shows some tendency to hysterical paroxysms; she may have one or two; presently she does not so readily as usual recover from one of these; she becomes odd in her manner; obstinate; talks at random; refuses food; and she is now evidently delirious, which may be accompanied with more or less of stupor and indifference to all around, or may be violent and furious; she will try to get out of bed; be mischievous; attempt to injure herself or her attendants; wakeful; and in such cases it is that the patient will act and talk in a manner apparently the most repugnant to the character and reputation which she had previously enjoyed; or the real defects in her character, her real inclinations, which principle, or prudence, or cunning had taught her to overcome or conceal, will become developed, and she will be obscene or amorous; or exhibit violent hatred towards others, or other feelings to them. It may be that she will now speak the truth which before she did not venture to do—*in delirio veritas*, as *in vino veritas*.

In many instances the paroxysm of hysteria is accompanied by delirium of greater or less intensity, which comes on and goes off with the paroxysms, or remains for some time after it, or may precede it; and this form of hysterical delirium obviously resembles the epileptic in the relation which it bears to the paroxysm, just as the hysterical paroxysm often resembles the epileptic so closely, that it is impossible to distinguish the one from the other.

This form of delirium is not often fatal, if not treated on a depressing or lowering plan; its tendency is to recover, or to pass into a chronic state, from which the patient may emerge in safety, or may become hopelessly lunatic.

Now and then we have opportunities of making *post-mortem* inspections of the brain, which, on such occasions, afford no indication of any special lesion during life beyond such as show that the general nutrition of the brain had been disturbed. In the case of a young lady who died after five weeks' delirium of this kind, I made a most careful examination of the brain. It looked somewhat shrunk, the convolutions small, and the subarachnoid effusion increased in quantity; the grey matter of the convolutions was slightly softened, but not more so than might be expected from its lying in contact with fluid for twenty-eight hours after death. Some of the small arteries penetrating the surface of the brain, at the fissure of Sylvius, seemed somewhat dilated, and some extremely small extravasations, less in size than a pin's head, had taken place into the mammillary bodies, not more than five or six in each. This girl was a person of strong sexual passions, and of ill-regulated temper. She was at an early period of life left an orphan in the hands of indiscreet relations—mistress of a small fortune, with all the ideas of the heiress of a considerable property. She was opposed successfully by her relatives in a love affair, which led to many family discussions and scenes, on which occasions she exhibited great violence. At length, after having been hysterical for some time, she exhibited undoubted signs of delirium, in which she was at times very violent, refused food for so long, that it was found necessary, in consequence of her state of debility, to feed her with an œsophagus tube. These points of the history of this case are of importance, as serving to explain the dilated state of the small cerebral arteries, which was produced no doubt by the frequent excitement of temper to which the patient was liable before her illness, and to the violence which she occasionally exhibited after the delirium had commenced, and the efforts she made when it was found necessary to make use of restraint.

In another fatal case, the subject of which was a young lady of twenty-two years of age, I found the brain and its membranes in a healthy state. The pia mater was well injected, but not more than might naturally be expected in a young person of active mind, and with a well-developed brain; and the arachnoid was perfectly natural. The brain itself was as perfect a specimen of the organ in a well-formed Caucasian female, of considerable personal beauty, as I ever beheld.

The history of this case was as follows:—She was of a highly hysterical diathesis, and irregular as to the catamenial function; the menses sometimes appearing too soon, at others retarded; sometimes profuse, and again scanty. She was accustomed to live in the country, but she had recently come to town to help her sister (who was in bad health) in looking after her domestic concerns. Her sister having been obliged to leave town, she was left in charge of her establishment, the responsibility of which she seemed to feel acutely; at the same time she exposed herself to a great deal of fatigue in escorting a country friend about town "to see the lions," and going to musical parties. On the 3rd of April she complained much of a throbbing headache, and she had passed two sleepless nights. She suffered from loss of appetite and nausea; there was no fever; the pulse 76. On the 4th, after another restless night, the pain in the head remained, and she vomited some of her food. On the 5th there was great irritability of stomach; everything, food and medicine, was rejected; she complained of severe pain in the vertex; pulse 64; no heat of skin. On the 6th the vomiting continued so that she retained no food; she retched a good deal, and brought up bile and mucus; headache intense; sleeplessness; pulse 60; tongue coated. This day a dozen leeches were applied to the temples, which bled freely, and the pain in the head was much relieved and the vomiting ceased for several hours. It returned, however, in the night, and she rejected both medicine and food.

On the 7th she became talkative and noisy; there was still sickness; pulse not above 70, and of a sluggish character; light painful to the eye, pupils sluggish.

On the 8th delirious; in sleep talkative and dreaming; it is necessary to rouse her by addressing her loudly, in order to gain her attention; there is a slight appearance of squint with the right eye, but this was probably nothing more than an increase in a natural cast in the eye, which we know is often produced in persons so formed under emotional excitement.

From this time the patient became extremely depressed; the delirium continued alternating with a semi-comatose state, and on the 12th she became almost completely comatose; retaining sufficient consciousness to enable her to take nourishment, which was rendered the more necessary in consequence of the exhaustion caused by a troublesome diarrhœa, caused probably by some calomel which had been given her. She died on the 14th.

I was much embarrassed in the treatment of this case by the resemblance of the symptoms to those of cerebral inflammation, which led me for some time to adopt an antiphlogistic plan, with which the powers of the patient were not very well able to cope. The vomiting, the pain in the head, the tendency to a comatose state alternating with delirium, are symptoms generally recognized as indicative of inflammation within the cranium; but against these might be placed the absence of fever, and of quickness of pulse; the hysterical constitution, and the previous fatigue and exhaustion; all of which, taken in conjunction with the results of the *post-mortem* inspection, convince me that the case was one of hysterical delirium, and that it would have been better had the patient been spared all antiphlogistic treatment.

Men are liable to a form of delirium which bears a close analogy with the hysterical delirium of

women, and which, there can be no doubt, is intrinsically of the same nature. I have seen it in overworked professional men, in students, and in hard-working artisans, even when of temperate habits.

The following instances will serve to illustrate this form of delirium:—A gentleman of 35 years of age, a solicitor, a man of gouty habit and highly sanguine temperament, having been unusually engaged in business of an exciting kind, was attacked with symptoms of catarrh extending to the bronchial tubes, but neither violent nor extensive. This, however, had a most depressing effect upon him, and on the third or fourth day he became violently delirious. He knew every one around him, but could not be persuaded that his affairs were not in a ruinous condition; at the same time, however, he would devise very reasonable plans for extricating himself from his supposed difficulties. He was very wakeful, and was with difficulty restrained from getting out of bed, to take, as he said, the necessary steps for arranging his affairs. This state of delirium continued, more or less, for a week, and passed off with profuse sweats and long sleeps, leaving the patient in a state of great exhaustion, notwithstanding diligent supplies of support and stimulus which were constantly administered to him.

In another instance, a young man of 25, who was pursuing the profession of a teacher of music, had been working very industriously at the studies necessary for his profession; and, at the same time, his mind was much engaged with religious subjects, and greatly excited by the ardent appeals of one of those preachers who address themselves chiefly to the feelings of their hearers, and aim at exciting their imagination rather than convincing their judgment. His illness, as in the previous case, began with a catarrh of a slight kind, but accompanied with considerable prostration of strength. Delirium became developed in a few days, and it was with the greatest difficulty that the patient could be controlled. His thoughts were wholly occupied with religious subjects, evidently of the same nature as those of the discourses of which he had lately been a hearer. He imagined himself a prophet sent by God for the regeneration of mankind, and that it was necessary, prior to his entering upon his prophetic office, that he should die, and that after three days, he should return to life and then proceed upon a tour of declaring his message to different people. He used to feign being dead when I was present, but was not able to keep up the appearances of death throughout the day. Having for a day or two humoured his fancy, by appearing to be greatly shocked at his death, and to believe in its reality, the next day I gave him some practical proofs of his vitality, and threatened to make a *post-mortem* examination of him and to open his head on the following day unless he revived. This had the desired effect; the next day I found him restored to life, much more tractable, willing to take food, and in about a fortnight he had completely recovered, but with considerable weakness.

Puerperal Delirium.—I shall next notice the delirium which accompanies the puerperal state, which resembles very closely hysterical delirium, and is, no doubt, essentially of the same nature. It is well known under the name of puerperal mania or puerperal insanity; but, although this title may justly be given to some of the cases which are very chronic, it seems to me that it is quite as erroneous to say of patients who had suffered from this form of delirium, that they had once been insane, as to class among lunatics patients who had once suffered from the delirium of typhus or of erysipelas.

The clinical history of this form of delirium is told in a few words.

It occurs generally soon after parturition, and during suckling—rarely during the latter months of pregnancy.

It is most frequently brought on by some mental emotion, or by some great exhaustion—as from a lengthened labour—with a dead child—or profuse hæmorrhage, or by the debility induced by suckling in a feeble constitution.

It is apt to occur in women of hysterical constitution; but it may be developed in persons with whom the marks of that state of constitution are not prominent.

As in other forms of delirium, the mental disorder appears to be very various,—from slight raving to the highest degree of fury, or from slight melancholy to a state of depression and dulness almost amounting to coma.

The greatest number of cases of puerperal delirium recover. Dr. Wm. Hunter pointed out the very important practical fact, that it is the amount of fever, or perhaps the rate of pulse, which may be taken as the best guide in forming the prognosis. Although I have not seen this form of delirium on an extensive scale, I have seen enough of it to lead me to believe, that Dr. Gooch gives a perfectly accurate account of it when he says, that there are two forms—the one attended by fever, or at least by a rapid pulse; the other accompanied by a very moderate disturbance of the circulation; and that the latter cases, which are by far the most numerous, recover; that the former generally die. These are the cases which are in the greatest danger, and which require the most constant vigilance on the part of the Medical and other attendants.

There are, however, as Dr. Gooch remarks, some other circumstances to be taken into the account of the prognosis: thus, the early appearance of the delirium after delivery, especially if it be of the maniacal kind, is more dangerous to life than its late appearance, and its being of the melancholic kind. "Nights passed in sleep; a pulse slower and firmer, even though the mind continues disordered, promise safety to life. On the contrary, incessant sleeplessness, a quick, weak, fluttering pulse, and all the symptoms of increasing exhaustion, portend a fatal termination, even though the condition of mind may be apparently improved." Dr. Gooch adds, that in cases which he has seen to terminate fatally, the patient has died with symptoms of exhaustion, not with those of oppressed brain, excepting only one case. One of my own cases died apparently from the exhaustion caused by removing the patient from her bed, which was done with great care, in order to have her cleaned, and the bed made.

In examining the heads of patients who die of this disease, we fail to discover any distinct evidence of special lesion either of the brain or its membranes, excepting in cases were some previous disease of the brain had existed. In these fatal cases recorded by Dr. Gooch, no morbid appearance was found other than that which follows loss of blood. Esquirol makes this statement:—The examinations of the bodies of those who have died, whether recently confined or nursing, after having been a longer or shorter time disordered in mind, discovers nothing which throws light upon the material cause, nor upon the seat of this derangement.—Tom. I., p. 244.

Anæmic Delirium.—The next form of delirium which I shall notice is that which arises from deficiency of blood, or what I may call *anæmic delirium*. It may arise where the blood is imperfectly formed, or where the system has been subjected to great losses of blood. Thus, in some cases of extreme chlorosis, we meet with delirium which is apt to assume the maniacal character. And, on the other hand, it may arise in cases of profuse menstruation or menorrhagia. Some of the cases of hysterical delirium are nearly allied to this, and if the hysterical diathesis exists in a patient subject to excessive losses of blood, it will predispose to this form of delirium.

Again, many of the puerperal cases of delirium are clearly attributable to the excessive losses of blood from hæmorrhage, or from unduly active depletion by leeches, or by general bleeding. Dr. Marshall Hall lays it down, and I think with great justice, that "loss of blood is by far the most frequent and influential source of delirium or mania occurring in the puerperal state.

A good example of this form of delirium is given by Dr. Abercrombie. Many years ago (he says) I saw a man who was seized with bleeding from the nose to such an extent, that at last it became necessary to arrest it by pieces of sponge carried up from the fauces. Next day he was without complaint, except great weakness; on the third day he became highly maniacal; pulse generally from 90 to 100, and soft.

This form of delirium is not unfrequently preceded or followed by attacks of violent convulsions. I related a remarkable case of this kind in the Lumleian Lectures of last year. The patient was a delicate woman, who miscarried with some hæmorrhage. After this she became thin and pale. While in this state, she experienced some giddiness of the head, as well as slight delirium, for which she was bled and had leeches applied. Owing to the giving way of the bandage on her arm, and the application of additional leeches to relieve the supposed congestion in the head, she lost still more blood, her convulsions recurred, and she became delirious and maniacal.

Cases of this kind will be more rare, when a more general assent is given by the members of the Profession to the doctrine, that congestion of the brain will not account for giddiness and delirium, and other signs of disturbed cerebral function.

Traumatic Delirium.—A remarkable form of delirium has long been known to surgeons as apt to follow severe injuries, whether from accident or from surgical operation. Dupuytren has left a highly graphic description of this form of delirium, and has given it the name of *nervous or traumatic delirium*.

A man meets with a severe accident,—a compound fracture,—or he undergoes a great surgical operation. For a day or two, matters seem to go on well, when he suddenly becomes confused in his ideas, incoherent,—and, at length, he becomes wild, and talkative, and wakeful,—refuses food,—tries to get out of bed,—perhaps tears off his bandages or splints,—and, what is very remarkable, seems perfectly indifferent to pain, and moves the broken limb or injured part, as if it were in a natural condition. Sleeplessness is a prominent feature of this delirium, and when that is overcome, as it frequently may be, by the careful use of opium, the patient gets well; but sometimes the delirium is so violent as to exhaust the patient in a few days. Nor does the delirium always bear a direct proportion to the severity of the injury. Dupuytren relates the case of a young man in whom it came on in consequence of a slight injury to one of his toes, and killed him in two days.

In these cases, as in the other examples of delirium which I have mentioned, *post-mortem* inspection discloses no lesion of the brain or the membranes. "Neither in the cerebro-spinal apparatus, nor even in the other organs," says Dupuytren, "can we perceive any material lesion which can explain the disturbance which has taken place during life, which can afford a satisfactory explanation of the cause of death."

Delirium occurs in connexion with typhus fever, erysipelas, inflammations of internal organs, as the heart, lungs, and with the exanthemata.

Delirium of Typhus.—The delirium of typhus is apt to come on in the second week. It varies in its character from a low muttering semi-comatose condition to a highly excited maniacal state. Coming on in the course of a disease which prostrates the powers of the patients, it must be regarded as a very formidable symptom, especially when it assumes the maniacal form; for under the influence of this state of excitement the patient is often prompted to get out of bed, or otherwise to exert himself, and thus great exhaustion is produced, and not unfrequently a patient will die from sudden syncope, caused by the effort he has made.

I have had many opportunities of examining the bodies of patients after the delirium of typhus, and in no instance have I been able to detect any lesion bearing upon the delirium. The brain in typhus is essentially healthy; but the condition of its blood-vessels corresponds with that of the blood-vessels everywhere else, namely, a state of laxity of their coats, while they contain, or appear to contain, more than their normal quantity of blood, and that of a dark venous kind; in some instances, there is more or less subarachnoid fluid; in others that fluid is absent. Never is there any sign of an active morbid process, with inflammation either in the brain or its membranes, tending to generate new matter, as lymph and pus, and destroy existing tissue.

This form of delirium is of much shorter duration than most of those which I have already described; nor has it any tendency to degenerate into a chronic state, as is the case with the hysterical and with the puerperal delirium. Like the traumatic

delirium, it seldom lasts many days, either killing the patient by exhaustion, with more or less of coma, or ending in recovery.

Erysipelatous Delirium.—The delirium of erysipelas resembles very closely that of typhus, excepting in this point, that it is perhaps more frequently of the more active and violent than of the low and muttering kind. It commonly comes on with more or less of suddenness. You leave your patient going on well; on your next visit, a few hours afterwards, you find him talkative, rambling, attempting to get out of bed, noisy, and soon he becomes so violent as to require the constant watchfulness of one or two attendants, or the restraint of the strait waistcoat, to prevent him from injuring himself or others.

It occurs in both idiopathic and traumatic erysipelas, and is not confined to that of the head and neck, but will take place in cases in which the erysipelas is confined to the trunk, and never reaches the head. It seems more apt to occur in debilitated subjects, in patients after operations which have caused much loss of blood, and in the low and decidedly typhoid forms of erysipelas.

Patients die in it just as in the delirium of typhus; they die suddenly in an effort, or they become much exhausted, or they fall into deep coma, but more frequently they recover, especially if care be taken to prevent them from making violent exertions, and to give them a proper amount of support. The duration of this delirium is not in general above a few days, and it very rarely degenerates into a chronic state.

The inspection of the brain in these cases shows no sign of active disease, nor any evidence, as might not unreasonably be supposed, of a state of brain similar to that of the external parts. The erysipelas does not fly from the exterior to the interior. There is no metastasis, although I should not be prepared to say that the brain is not affected by the poison of erysipelas. It is certain, however, from numerous *post-mortem* examinations, that the brain and its membranes of patients dying under this form of delirium exhibit no morbid alteration of any kind sufficient to account for the phenomena. What I have most frequently seen in this, as in other forms of delirium, has been a state of pallor of the grey matter, and an increased number of bloody points in the white matter of the hemispheres.

Rheumatic Delirium.—That form of delirium which accompanies inflammation of the lung, or of the heart, occurs so commonly, if not uniformly in the rheumatic state, that I shall describe it in connexion with that delirium which arises in the course of rheumatic fever, under the name of *rheumatic delirium.*

The following description of this form of delirium accords with what I have myself seen, and what I find recorded by others:—A patient is seized with all the ordinary symptoms of rheumatic fever; and he goes on without any untoward symptoms for three or four days, it may be for a week, or even later, when the nurse having, perhaps, reported that he had passed a restless night or two, and wandered more or less, we find him delirious, raving, talking wildly, and, as in the traumatic delirium, entirely disregarding his hitherto exquisitely painful and still swollen joints. The tendency in these cases is to the acute maniacal state and to wakefulness; so that frequently the patient requires restraint, and always the closest watchfulness.

As in the other acute forms of delirium, patients often die in this evidently from exhaustion. Sometimes they quickly fall into a state of profound coma, which lasts from one to twenty-four hours, and terminates in the death of the patient. I suspect that moving patients from one place to another, in rheumatic fever, is apt to bring on this kind of termination, for I have had several cases in which a patient was brought into the hospital late in the afternoon, having been three or four days in rheumatic fever, and in the course of the night he became delirious, and then comatose, and died.

This delirium is sometimes ushered in by other symptoms, which denote a more extensive disturbance of the nervous system than delirium would do. Thus a patient will be seized with chorea-like jactitations, affecting the upper extremities and the muscles of the face; and sometimes a condition almost tetanic is present, and more or less of rigidity and opisthotonos are produced.

Coincident with the first appearance of these symptoms, that is, either of the delirium or the jactitations, we frequently find, but by no means always, the first signs of inflammation of the pericardium or of the endocardium, or of one or both lungs, or of the pleura; and, as the delirious state diverts the mind of the patient from the perception of all pain, it often happens that no other indications of the internal inflammation can be obtained than those of the physical signs, the rubbing sound, or the bellows murmur, or the altered breathing sounds, and hence it has not unfrequently happened that, in the midst of the great disturbance of the intelleet, the inflammation within the thorax has been unsuspected and undetected.

Judging from my own observation of this delirium, I would lay it down, that it occurs chiefly in those patients who exhibit considerable pallor—whether that pallor be simply the result of the rheumatic state, or of that combined with the effects of a greater or less loss of blood. I have seen it brought on in a patient who exhibited no untoward symptom, by the application of some leeches to a rheumatic joint, without any cardiac inflammation; and I have also seen it come on after very large bleeding, both general and topical, when there was no very high development of the rheumatic state, and when also the signs of cardiac inflammation were at most indicative of but a slight endocardial inflammation. But, on the other hand, nothing is more certain, than that it has come on when there has been no bleeding practised at all; and, that it has got well, when bleeding, topical or general, has been practised *after* the appearance of the delirium.

The inexperienced practitioner is apt to mistake these cases for inflammation of the brain and its membranes, and to treat them accordingly. The first case of the kind which occurred to me many years ago, convinced me of the error of this view. A fine young woman, of twenty-five years of age, was under treatment for rheumatic fever—pericarditis was present and was detected, and treated by leeches, blisters, and mercury. On the second day, after the discovery of the pericardial inflammation, she became delirious and furious; her head was shaved, leeches applied to the temples, and a thorough antiphlogistic plan pursued; but the patient sunk into coma and died. And the *post-mortem* inspection disclosed a brain healthy, but pale and exsanguineous, with membranes devoid of the slightest indication of morbid deposit.

My friend, Mr. Henry Smith, of Caroline-street, Bedford-square, has communicated to me this case, which occurred to him in May, 1848, and which I may mention, to show that antiphlogistic treatment applied to both the heart and the head will not avert death.

A navy officer, aged 48, who had lived hard, was attacked with rheumatic fever, complicated with pericarditis and pleuro-pneumonia, which appeared on the fifth or sixth day, and was duly detected. He was treated by leeches, calomel, and opium. In two or three days more, violent delirium became developed, for which Mr. Smith at first prescribed opium, but a physician who was called in, believing that the delirium depended on inflammation of the cerebral meninges, prescribed leeches to the head, which were applied, but the delirium increased and the patient died. The heart was found covered by a thick layer of lymph, and the brain and its membranes perfectly healthy, the former being "white and comparatively bloodless."

Moreover, these cases will die even where a very slight affection of the heart exists. I take the following from the records of the London Pathological Society:—The patient, a girl of 21 years of age, died on the seventeenth day, of rheumatic fever, there having been no untoward symptoms up to the day preceding her death. On that day she began to be restless, and to exhibit indications of approaching delirium; during the night the delirium became fully developed, and early the next morning she became quiet, as if from exhaustion, and she gradually became comatose, and died at six o'clock a.m. She was examined nearly thirty hours after death, and Dr. Bence Jones, whose patient she was, reports—"That the brain and its membranes were rather dryer than natural, but otherwise presented nothing remarkable. No excessive congestion was found, and no effusion of blood or water." And as regards the heart, "about two ounces of serum were found in the pericardium; the very slightest roughness of the surface of one auricle was observed, but otherwise there was no evidence of inflammation of the pericardium; the valves of the heart were perfectly healthy."

And such is the history of all these cases of rheumatic delirium. It is as with all other forms of delirium which I have enumerated, that no morbid appearance whatever is to be found in those organs of the brain and spinal cord, whose functions are so disturbed as to mask and conceal the symptoms of more serious diseases affecting other organs.

Were I to rely only on my own experience of these cases, and on such cases as I have met with recorded in various works, or as have occurred in the practice of friends, I would say that no organic disease, *i. e.*, no inflammation, no effusion of pus or lymph is ever met with when this rheumatic delirium occurs. But I hesitate to make this statement, because so high an authority as Dr. Watson admits, that metastasis of rheumatism to the brain may take place; and adds, "Nay, I know that it is so, that it sometimes is so; but not often."—Lect. Vol. II., 2nd Ed.

Whoever will take the trouble to read the seventh section of my friend Dr. George Burrows' valuable Work on Disorders of the Cerebral Circulation, will find there a body of evidence of the most valuable kind, in favour of the non-existence of any inflammation of the brain or its membranes in this delirium. Did time permit, I could add several cases to those which Dr. Burrows has enumerated, all corroborative of the same important point in the clinical history of this disease.

ORIGINAL CONTRIBUTIONS.

ON THE TREATMENT OF STRICTURE OF THE URETHRA BY THE PERINEAL SECTION.

By HENRY SMITH, Esq., F.R.C.S.

Some of the observations contained in the present communication, together with a relation of some of the cases which are now detailed, formed the basis of a paper which I read before the Westminster Medical Society in the early part of the year. Much interest was at that time excited respecting the treatment of some forms of stricture of the urethra by external incision, in consequence of the advocacy of that method by one of the most able and distinguished of British Surgeons. Since that period the interest regarding this matter has not lulled, but has rather increased. And as I have had numerous additional opportunies of seeing the views and opinions which I held respecting this plan of treatment confirmed, I have determined to lay before your readers the results of my further observations on this very important and much debated subject; and I would beg to premise, that I do not presume to advance any opinion (of little value as it is under any circumstances), unless it be the result of well and self-observed facts, and those facts I will endeavour, in the following paper, to be a faithful chronicler of, and I shall not shrink from expressing an opinion, grounded upon these facts, however contrary it may be to that of those to whom we are in the habit of paying the utmost deference in surgical matters.

The main object I have in view, is to inquire into the real merits of the treatment of certain forms of stricture of the urethra by external incision. It will be foreign to my purpose to enter into the treatment of this affection which is most commonly employed, as it will be my main endeavour to show how far, and under what circumstances, perineal section may be applicable. Moreover, by reference to cases which have strictly fallen under my own cognizance, I shall make an attempt to point out both the good and bad effects of this proceeding, and thus be able to assist in laying down some definite rules for the guidance of the surgeon, who may have to put in force this mode of treatment.

All surgeons who are in the habit of seeing stric-

ture of the urethra on a large scale, will every now and then meet with a case which resists the ordinary mode of treatment by dilatation, a process which, when patiently and carefully carried on, will probably be effectual in removing nineteen out of twenty strictures. These severe cases, however, are not simple, but are always complicated with some consentaneous or secondary morbid condition of the parts, which renders it necessary that some more effectual measure than the simple use of the catheter, should be had recourse to for relief or cure; and, before proceeding further, it will be well to give a sketch of one of these inveterate forms of stricture, and to look at the immediate and secondary results which are in time produced.

The history of such a case as is here alluded to will be found to be somewhat the following:—A man at the age of twenty or twenty-five gets stricture from repeated attacks of gonorrhœa; at first the symptoms are slight, and give the patient but little trouble; consequently, he neglects applying to a surgeon, or he goes once or twice only; instruments are passed, or attempted to be passed, and the benefit received is but temporary; time advances, of course without any proper treatment being used, the urethra gets more and more contracted, until, from the severity of his symptoms, the patient is induced to go to his surgeon again. Now, probably, great difficulty is experienced in the introduction of instruments, where before there was none or but little. The patient is obliged to submit to much pain, and this will induce him to leave off any attendance so soon as he has obtained the slightest relief, and matters will gradually get much worse. The stricture gets tighter and tighter, an additional extent of the urethra becomes contracted, and the urine is passed with difficulty, and as there is not a free vent by the natural passage, great irritation is produced, abscess is formed, which ultimately degenerates into fistulæ, which thus become vicarious outlets for the urine; thus considerable relief is for a time afforded to the patient, in consequence of an additional escape of urine; but this is only for a time. In proportion as these openings are formed, the natural passage becomes more contracted, and ultimately is almost entirely obliterated. The changes which now take place are more important and serious, from the constant trickling of the urine through the tortuous sinuses in the scrotum and perinæum; those parts become excessively irritated, great enlargement and thickening of the tissues occur, the subserous cellular texture is converted, in some severe cases, into a thick brawny mass; this deposit constantly increasing, from the existing irritation, presses upon and surrounds the urethra, and adds to its almost complete obliteration. The whole of the water comes away by the false openings, or only occasionally dribbles from the urethra in drops; now and then attacks of retention of urine come on; the patient is rendered constantly wet and miserable, his constitutional powers begin to feel the mischief; he becomes feverish and low spirited, loses flesh, gets but little sleep in consequence of the continual calls to pass water, and he is altogether in an extreme case, reduced to as pitiable a condition as can well be imagined.

In the majority of these cases, which are presented to the surgeon's notice, the stricture has existed for 10, 15, or 20 years, consequently the effect which is produced on the parts behind the obstruction are most serious. In consequence of the impediment to the free flow of urine, and the efforts which are continually made to pass it, the bladder becomes thickened, its mucous membrane gets into a congested and softened condition, and in some advanced cases this membrane gets ulcerated, and thus is caused very intense suffering to the patient, independently of those sufferings before mentioned. The mischief, moreover, does not stop here; for, as time advances, and the obstruction becomes more decided, the kidneys suffer from the existing irritation, and lose their healthy texture, and thus the danger to which the patient is exposed is rendered much more serious.

It is in such instances as these just described, that the ordinary treatment by dilatation will sometimes fail; even in the hands of the most careful, and recourse has been had to an operation, by laying open the whole extent of the contracted part of the urethra, and at the same time slitting up any sinuses which may have formed in the scrotum and perinæum. I have now had numerous opportunities of observing the result of this plan of treatment, and I am fully convinced that, under certain circumstances, and in certain forms of complicated stricture, it is a proceeding which is as effectual as any of the great operations of surgery, in giving both temporary and permanent relief. On the other hand, my observations have led me to the conviction, that it is a proceeding of a very serious nature, and one not to be thought lightly of by any one surgeon, however skilful he may be in the use of instruments. The operation of opening the urethra from the perinæum is one which is not unfrequently followed by the death of the patient who submits to it; consequently, it will be necessary to pause before we rashly enter upon the performance of it, and there should be some absolute and urgent necessity existing, to induce the surgeon to undertake it, if he is anxious to do his duty to his patient, and to gain the approval of his own conscience.

The cases to which the perineal section is applicable, are those old and severe instances of stricture which are attended by the formation of fistulæ, and by what I would designate as the brawny degeneration of the cellular tissue of the scrotum and perinæum. In many of these cases there is such an extent of the urethra implicated, and such a degeneration of tissue, that all efforts on the part of the surgeon will fail in any attempt to pass the catheter, and the patient generally has suffered so much, that it will be necessary to give him relief by some other means. This relief will be the most speedily and effectually obtained by a division of the whole of the contracted urethra, and by opening up any sinuses which exist. There will be no longer any obstruction to the flow of urine, and the unhealthy openings will be brought into a fair state to assume a healing condition; immense relief and a cure from all the patient's ills at once will be brought about, should no untoward event occur. These are the cases only in which the operation is absolutely necessary; and, as far as my own observation has extended, it is in such cases that the most fortunate results have occurred.

I have now had the opportunity of seeing *sixteen* instances in which the operation of dividing the urethra by perineal incision, for obstinate stricture, has been performed; and, as this operation is one which is not frequently performed, I think that it may be considered a very fair number to form some conclusions respecting its merits. Of most of these cases I have been able to take notes; and it will not, perhaps, be deemed out of place, considering the importance of the subject, to give a short history of each.

The first instance which presented itself to my notice, was that of a middle-aged man, who was admitted into King's College Hospital, under the care of Mr. Fergusson. He had laboured long under a very severe stricture, complicated with numerous fistulæ running through the perinæum and scrotum. No instrument whatever could be passed through the stricture. His health was very much reduced, from the constant irritation under which he suffered. The operation of perinæal incision was performed upon him; the fistulous openings were freely divided, and the patient made an excellent and rapid recovery.

In the second case, the patient had suffered originally from a fracture of the bones of the pelvis, and the urethra having become implicated, was rendered impervious to instruments. Here the operation was performed, and the patient recovered, and was enabled, before leaving the hospital, to wear a large-sized catheter.

In the third case, the patient had suffered from stricture for about twelve years, and had been under the care of several surgeons. I at one time had endeavoured to pass instruments, but, after several attempts, entirely failed. Some time after this, he came under the care of Mr. Fergusson, having retention of urine. This surgeon, with great difficulty, introduced a small catheter, and relieved the patient's sufferings. About eighteen months after this, the patient, who had had no treatment in the meantime, was suddenly attacked with symptoms of fever, for which he underwent treatment at the hands of a physician. A few days after admission, it was discovered that he had extravasation of urine, which, in fact, had been the cause of the constitutional symptoms. Free incisions were made, and the patient was rescued from a nearly fatal attack, and got comparatively well. About a month, however, after this, he was suddenly seized with the same symptoms, and was brought into King's College Hospital, under the care of Mr. Fergusson. Then was discovered a large abscess in the perinæum, and no instrument could be got into the bladder; the patient was fast falling into the condition of severe irritative fever, and it was evident that the only plan of saving him was to make a free incision into the perinæum, and at the same time divide the whole of the strictural portion of the canal. The operation was performed in the usual manner; in consequence, however, of the extreme hardness of the strictural portion, and its length, the proceeding was one of unusual difficulty, and the patient was some twenty minutes on the table. A satisfactory termination, however, was brought about, and the patient made an excellent recovery, leaving the Hospital in a month, being able to use a full-sized catheter.

As some surgeons appear to doubt the performance of a cure by incision, in consequence of the after-contraction which takes place, I must be allowed to state; that I myself examined this patient more than twelve months after he had undergone the operation, and I passed with ease a Number 10 catheter into his bladder; and, moreover, it must be stated, that, in the interval between this period and the time he had left the Hospital, he had never had any instrument whatever passed through the urethra.

The subject of the fourth case was an elderly man, under the care of Mr. Fergusson, who had a terrible stricture, involving the greater part of the urethra, complicated with perineal fistulæ; no instrument whatever could be passed into his bladder; the operation was performed in the usual manner, and in a few weeks the patient made an excellent recovery.

In the fifth case the patient, a man between forty and fifty, had suffered from stricture for twenty years, and was brought into a most pitiable state of suffering, when he was admitted into King's College Hospital. His health was much shattered, and he could hardly walk about, and was tired of his life. An obstinate stricture existed, through which no instrument could be passed; and there was, at the same time, perineal fistula. The operation of external incision was performed, and the patient made an excellent recovery, and was discharged from the Hospital in six weeks, able to use a large-sized catheter.

The sixth case was that of a patient, about fifty years of age, who had long laboured under stricture. He was admitted into the Hospital with the complication of perineal fistula. No instrument whatever could be passed into his bladder. The operation of perineal incision was performed, and with the same result as the cases before-mentioned; the patient left the Hospital in about six weeks.

The seventh case I will give at more length, as it is extremely interesting. The patient was a man between thirty and forty; he had long laboured under stricture, and some time ago had been under the care of a person who assumes a great superiority in the treatment of strictures, but no benefit was derived from the treatment the patient had to undergo. Some time after this he came under the care of Mr. Bowman, of King's College, who endeavoured for about three months to introduce a catheter, but vainly. The patient was then lost sight of for some months, when Mr. Bowman was suddenly sent for to his house, and found his patient nearly dead from enormous extravasation of urine; free incisions were made, and the patient was snatched from most imminent death. It appears that the poor fellow had been recommended to go to one of those individuals who render themselves chiefly notorious by advertising their pretended acquirements to the public. In consequence of his being unable to pay this person's fee, a friend of the individual in question was referred to, who took the patient in hand, and endeavoured to cure him by physic alone, and during this CURATIVE (?) course the extravasa-

tion of urine took place, and the learned practitioner, not understanding the nature of the case, allowed the poor patient to lie for some days, until he was brought nigh unto death's door, when, happily, Mr. Bowman was sent for, who rescued him from the grave. The patient recovered from this condition, but his stricture remained as bad as ever; fistula remained, and his scrotum and perinæum were enormously thickened; Mr. Bowman, therefore, determined to cut through the stricture, and, knowing the interest I took in these cases, he kindly asked me to assist him in company with Mr. Fergusson. The operation was performed in an admirable manner, and the patient made an excellent recovery. This man called on me through the kindness of Mr. Bowman about three months afterwards, and I found him in an excellent state of health, but he took the precaution of constantly wearing a moderate sized elastic catheter, as he found it more comfortable for him to do so.

The subject of the eighth case was a poor man in advanced life, who was brought into the Hospital in a wretched condition. He had had stricture for several years, and, about twelve months prior to admission, had undergone an operation of some kind, at the hands of a distinguished surgeon who was then attached to one of the London Hospitals; still, at the end of the year, the patient was as bad as ever; numerous fistulæ existed in the perinæum, and there was a copious muco-purulent discharge from the bladder. Mr. Fergusson cut through the strictured portion of the urethra, and laid the sinuses freely open. The patient suffered little from the operation, and went on well for some time, but great irritation was produced by the disorder of the bladder, and he sank some weeks after the operation. On a *post-mortem* examination no extravasation of urine was found in the pelvis. The incision had been made in the proper direction, but the bladder was found to be considerably diseased.

The ninth and last case of stricture complicated with perineal fistula, in which the operation was performed, occurred in the practice of Mr. Partridge, in King's College Hospital a short time ago. The patient, who was a man between thirty and forty years of age, had suffered from stricture for eight years, and was brought into the hospital with a perineal abscess. This was opened. No instruments could be passed into the bladder, and, as the patient was suffering very much, Mr. Partridge laid open some sinuses in the perinæum, but without dividing the urethra; this, however, gave no relief, and as no catheter could still be passed, Mr. Partridge, ten days after the last proceeding, freely laid open the urethra. Unfortunately erysipelas seized the patient, and he was carried off in ten days after the last operation. On *post-mortem* examination there was no extravasation of urine found; there were several old false passages in the urethra, and bands in the prostatic region, and the mucous membrane of the bladder was congested.

In the tenth case there was an impervious stricture, but no complication of fistulæ or perinæal abscess. The patient was a fine healthy man about 35 years of age. He had suffered for sometime with stricture, and had been treated unsuccessfully in the country. No instrument had been passed into his bladder for 18 months, and, as he was getting worse, he was sent up to Mr. Fergusson for the purpose of having an operation performed upon him. On his admission into the hospital that surgeon carefully examined him, and found an impassable stricture at the bulb; there was at the same time a profuse muco-purulent discharge from the bladder; in other respects the patient was healthy. After he had remained in the hospital some days, Mr. Fergusson performed the operation upon him; it was long and difficult, but there was very little hæmorrhage. The patient went on pretty well for some days, although he never appeared in a good condition after the operation; he seemed depressed more than is usual after it. About the tenth day he began to decline visibly; great exhaustion came on, the pulse became rapid and feeble, his tongue was dry, and there was a peculiarity about the expression of his eyes, caused by the slight drooping of the lids, and a deceitful calmness which indicated the proximity of death, and he sank on the thirteenth day from sheer exhaustion, for there was nothing wrong about the wound; no erysipelas or œdema of the scrotum, and the urine was freely passed through the catheter which was retained in his bladder. On *post-mortem* examination, nothing was found to constitute a reason for his death, unless it was a very thin and fatty state of the heart; but there was no extravasation about the pelvis. The bladder was somewhat thickened, and the kidneys were conjested.

The last case in which the operation was performed—there being impervious stricture—has very lately occurred in the practice of my friend, Mr. Nunn. This was an instance of extreme interest; and I shall be somewhat more precise in detailing it. The man who was about forty years of age had been suffering from stricture for about sixteen years, for which he had nothing done. About three weeks prior to Mr. Nunn's seeing him, his urination became so difficult as almost amounted to complete retention,—the water only dribbling away from him. He lay in bed for this time. When Mr. Nunn saw him, he was in a wretched condition; his bladder was filled, and he was suffering from a chronic state of retention. There was a stricture involving a great portion of the spongy urethra to the bulb. At the same time there was great thickening and swelling in the perinæum. No instrument could be passed into his urethra. Mr. Nunn requested me to visit the patient with him, as he deemed it a fit case for dividing the urethra by the perinæal incision, and thus bring about temporary and permanent relief to his patient. I quite agreed with that gentleman in the view he took of the case; it being very evident that, as no catheter could be introduced, and, as the patient was dying from retention—his countenance was already getting anxious, and his tongue dry—the water must be drawn off in some manner; both the puncture above the pubis, and that by the rectum was undesirable, as the original cause of the mischief would not by these operations be removed. Mr. Nunn, therefore, after having introduced a grooved staff as far as the stricture, cut down upon its point. The knife was then run along the groove, dividing all the thickened texture in its way. In this operation an abscess was opened in the perinæum. About two quarts of urine, mixed with pus, was drawn off. In the evening of the same day the patient was much relieved; his countenance was more cheerful; his pulse was firm and regular, and the tongue had lost its dryness. On the next day he was not so well; the constitutional disturbance was more severe; and on the following day he had an epileptic convulsion, which recurred at intervals, and carried him off three days after the operation. It is unfortunate that in this instance the patient had not sent for Mr. Nunn a week before; for, most probably the operation, which was performed with the most admirable dexterity, would at that time have saved his life.

13, Caroline-street, Bedford-square.

(To be continued.)

HOSPITAL REPORTS.

LONDON HOSPITAL.

PUNCTURED CHEST.

On Tuesday, the 16th, a strong, healthy man, aged 28, was admitted into the Hospital, under Mr. Adams, having about half an hour previously fallen on the top of some iron railings, one of which had penetrated the right side of his chest, about an inch below the pectoralis major, where it forms the margin of the axilla.

On his admission he was rather faint from considerable hæmorrhage, which had saturated his clothes on that side; beyond this, he complained only of a little aching pain.

The wound, which was somewhat ragged, and about an inch in length, bled but slightly; its long axis was oblique, with regard to the borders of the ribs; and, extending upwards from it, over the clavicle and shoulder, was a large emphysematous tumour, which interfered with the lateral movements of the head. Percussion on that side was dull, and the respiratory murmur could not be heard. None of the ribs were fractured.

A flannel bandage was applied to restrain any movement of the arm, and water-dressing to the wound. He was ordered tinct. opii, mxxv. statim.

From the statement made by the patient, it appears that the diamond-shaped extremity of the railing was completely buried in the wound, being prevented ftom penetrating further by a ring, which was placed just below it; so that it must have gone to the depth of three or four inches, taking a direction upwards behind the clavicle, where there was a slight ecchymosis.

17th.—Excepting a slight aching at the wound, he is entirely free from pain. Respiration natural. Skin cool and moist. The emphysema is fast disappearing. Wound healthy, and is now strapped. Pil. hydr. chlor. gr. ij., nocte maneque.

In this state he has continued without any febrile or inflammatory disturbance; the hydr. chlor. was omitted the next day, and the wound is now closed; there is still no tenderness along its tract, or pain either in respiration or on coughing.

During the progress of the case, there has not been any expectoration of a sanious character.

Mr. Adams remarked, that this case was an instructive one, inasmuch as it was unaccompanied by any symptoms of an inflammatory character, and, consequently, without any depletory measures being necessary; this being the course of treatment he considered most proper to be pursued in this and in similar cases.

GUY'S HOSPITAL.

NECROSIS OF THE ULNA.

A young man was brought into the theatre on Tuesday last, who had been admitted into Guy's Hospital, under the care of Mr. Bransby Cooper, for disease of the ulna, consequent on a severe blow which he had received some time previously. The blow was followed by inflammation of the part struck, and by subsequent stripping off of the periosteum to a considerable extent. There was now a large opening at the back, and about the centre of forearm, which exposed a portion of bone the size of a half-crown. It is immoveable on the subjacent part, white, dry, and smooth, and it seems to be somewhat enlarged. Mr. Cooper, deeming it to be a case of exfoliation, and believing that it had separated sufficiently from the healthy bone, determined on its removal. For this purpose the integument was divided upwards and downwards, as well as laterally, so as freely to expose the surface of the ulna. The bone being immoveable, the elevator was applied, but without being able to raise up the diseased portion of bone. On further examination, the whole circumference of the shaft appeared similarly affected. The small trephine was now applied for the purpose of examining the internal structure of the bone, and to see whether it contained any necrosed portion. The bone appeared harder and firmer than natural, and its deeper structure similar in condition to the outer or exposed portion. A careful examination could detect no necrosed bone in its interior. The wound was dressed, and the man removed to bed.

Mr. Cooper considered that this was at first a case of inflammation of the bone and its membrane,—the result of the injury which the man had received. The inflammation continuing, and pus probably forming between the periosteum and bone, the latter had become stripped off, and with it the arteries supplying capillary branches to the outer part of the bone. The nutritious artery had probably not been injured; and, though its branches anastomosed with those sent inwards from the periosteum, yet it was unable to supply the bone with sufficient nourishment. The bone was therefore dying, and would most likely result in the patient's losing the shaft of the ulna. Such a case had occurred not long before among the outpatients attending the hospital.

ST. GEORGE'S HOSPITAL.

INJURY TO THE SKULL—TREPHINING.

This occurred in a young man who was admitted into St. George's Hospital, under the care of Mr. Hawkins, after having suffered from a severe injury to the head, laying bare the bone of the vertex, and lacerating the right side of the forehead. He

remained insensible for a time, but when admitted had nearly recovered. He remained free from head symptoms until the fourth day, when slight erysipelas of the scalp supervened, from which, in a week, he had nearly recovered, when he was seized with a severe rigor, followed by great prostration, and his manner became flighty and incoherent. During the afternoon he complained of pain in the head. When visited, on the following day, his face was pale and vacant, his manner strange, but he was quiet and perfectly rational when spoken to. He had pain and uneasiness about the head, with partial paralysis of the left arm and leg. The anterior wound discharged a sanious pus, and the tissues around were puffy and inflamed. The pulse was very frequent; skin hot; tongue dry; he had two or three hours broken sleep. On the subsequent day the faculties were scarcely so much oppressed. He was rational when spoken to, but at other times wandered; tremulousness of hand; respiration rather shallow. An incision was made from the anterior wound upwards and backwards for two inches and a half, evacuating pus from beneath the tendon of the occipito-frontalis. Early the next morning cough came on, with involuntary evacuation of urine and fæces. In consequence of palsy of the left portio-dura, the face was drawn to the right side. The muscles on the right of the neck were rigid; the chin and tongue tremulous; the latter, when protruded, turning towards the paralysed side; the skin bedewed with sweat. On the following morning considerable effusion of blood had taken place under the occipito-frontalis tendon in the neighbourhood of the incision. When the dressing was removed, several large clots, and some grumous-looking pus were dislodged, to expose and secure the bleeding vessel, which appeared to be a small vein going to the longitudinal sinus. At the posterior wound the bone was dry and more denuded. In this locality the trephine was applied, and a disk of bone having been removed, about half an ounce of fetid pus mixed with blood issued out. The dura mater, beneath the aperture, was seen to be covered with pus and lymph, which, seeming to extend further under the bone, the trephine was again applied. It was followed by much bleeding, and several vessels required tying. After the operation the man became considerably depressed. The pulse rose to 184 per minute; he became more delirious, and gradually lost the power of speech. The paralysis was not at all relieved by the evacuation of the matter from beneath the bone. During the night he had frequent spasm of the muscles of the right side of the face. On the next day he was evidently sinking; but he remained conscious when aroused, almost to the time of his death. He had no convulsions.

The *post-mortem* was made twenty hours and a half after death. The wound extended from the right frontal eminence backwards to the lambdoidal suture. About the centre, and rather to its right side, two small discs of bone had been removed. The periosteum did not cover the bone for some distance around the trephined portion, and it was easily separable beyond this part. Where the bone was denuded, and also where the pericranium was easily separated, numerous apertures were seen filled with distended capillary vessels. Some blood was extravasated in the substance of the right temporal muscle. On removing the skull-cap some purulent lymph was found on the surface of the dura mater corresponding to the inflamed bone, and lying more on the right than on the left side. The diploe, also, to about the same extent, was filled with greenish and highly offensive pus. The dura mater, corresponding to the bone removed by the trephine, was covered with lymph and coagulated blood. There was some pus in the centre of the longitudinal sinus for about the space of an inch; but in front, and also behind this point, it was quite pervious and filled with blood. The cavity of the arachnoid contained some purulent lymph, as also the subarachnoid areolar tissue over the middle and posterior part of the right hemisphere and the left side of the falx cerebri, but to a more limited extent. There was a small quantity of recently extravasated blood adherent to the parietal arachnoid, at a point corresponding with the effusion of lymph, coagulated, and not deprived of its colouring matter. The dura mater, covering the right and middle fossa of the skull, was very vascular. Pus was effused in and beneath the arachnoid in this locality, and around the medulla also. In the right hemisphere, a quarter of an inch from its surface, and near the point where the trephine was applied, was found a small abscess the size of a hazel-nut. The left orbital plate of the frontal bone was fractured close to the crista galli.

Both pleuræ contained some semi-purulent fluid, and the walls were coated with recently-effused lymph. The lungs were congested and studded with circumscribed patches of inflammation. In the centre of some of these was a little pus, whilst in others distinct abscesses were formed. All the other viscera were healthy.

PROGRESS OF MEDICAL SCIENCE.

SCOTLAND.

[Edinburgh Correspondence.]

THE HARVEIAN SOCIETY OF EDINBURGH.

Friday, the 12th of April, being the birthday of the great discoverer of the circulation, the Annual Festival of the Harveian Society of Edinburgh was held in the Hopetoun Rooms, Queen-street. This Society has existed for nearly seventy years. It combines the character of a Society for the encouragement of Medical Science with that of a Convivial Club. In its capacity of a Scientific Society, it offers a prize annually to students of Medicine for the best essay on a subject announced the year before, and most commonly of an experimental nature. The subject for 1851 is, "Experimental Inquiry on the Mode of Action of Iron, comprising especially the question of its Accumulation in the Blood." There is also a triennial prize, the competition for which is open to gentlemen who are already engaged in practice. The disposal of the prizes, and the chief management of affairs, are vested in a Council, in which the members serve by rotation, the only permanent officers being the Secretaries. The Society itself meets only twice a year, one meeting being for business, and the other, the annual festival, at which the President of the year delivers an oration on some subject attractive to the Profession. On the last occasion, Dr. John Smith, well known as Visiting Physician to the Saughton Asylum in this neighbourhood, read, as President of the year, an interesting notice of the rise of Lunatic Asylums over Europe. After the oration, the dinner takes place, which is usually enlivened by the vocal accomplishments of no small number of the members. The members are elected by ballot. Fellows of the two Edinburgh Colleges, gentlemen who are or have been Medical Officers of the Army, Navy, or East India Company, and country practitioners, not being Fellows of either College, who reside more than six miles from Edinburgh, are qualified to become candidates. Visiters, however, who are not of the Medical Profession, may be introduced; and at present, two gentlemen not belonging to the Profession are permitted to be members,—namely, the chaplain, who is one of the Edinburgh Clergy, and the Secretary to the College of Surgeons. The latter gentleman, besides other qualifications, has been rendered farther eligible by having the diploma of "Doctor Hilaritatis" conferred upon him by the Society. The diploma is composed by the Bard—for the Society, not forgetting that Apollo presides over song as well as over medicine, has a Bard. This usage, as respects the diploma, is a remnant, as it would seem, of the "high jinks" described by Sir Walter Scott as practised in the last century at Edinburgh, among the members of the learned professions. Of this an extract or two from the diploma will convince the readers of the *Medical Times*.

DIPLOMA DOCTORATUS HILARITATIS.

Omnibus sodalibus
Bonis socialibus,
Vini potatoribus,
Joci amatoribus,
Hominibusque ceteris,
Testatur hisce literis,
Societas Harveiana
In taberna Barryana,
Se hodie in suorum
Numerum sociorum,
Lubenter accepisse
Riteque ascripsisse,
Virum bene notum
Dictum Joannem Scottum.

* * * *
* * * *

Ut fruatur nunc in toto
Privilegiis amplissimis,
Necnon jucundissimis,
Felicium virorum,
Harveii filiorum;
Videlicet—ad convivium
Harveianorum civium,
Se accurate reddere;
Quam maximum prandium edere;
Tunc casei Italici,
Et spiritus vini Gallici;
Sumere quod sufficiat,
Ut ventriculo beneficiat.
Post hoc, generoso
Vino copioso,
Rubro Lusitanico,
Albôque Hispanico;
Argillam madefacere
Et nasum calefacere,
Ad suam voluntatem
Atque capacitatem.

This we may perhaps venture thus to "do" into English:—

To all jolly boys
Who acknowledge the joys
Of wine and of jest,
And eke to the rest
Of mankind,—peers or peasants,—
Be it known by these presents,
That, with all due propriety,
The Harveian Society
Has this day enroll'd,
In letters of gold,
'Mid its members, renown'd
For enjoyment profound,
The man known to fame
As John Scott by name;
To hold and enjoy,
Without care or alloy,
Each privilege, treasure,
Advantage, and pleasure,
Which must ever abound
Where Harveians are found;
Without fail to repair
To their banquet, and there
A good dinner to eat
Of fish, fowl, and meat,
With a finish of cheese,
And "schnapps" if he please,
Taking what, without question,
Will suit his digestion;
And then, gay and merry,
With Port wine and Sherry
To moisten his clay,
And, in the same way,
To comfort his nose
As his feelings dispose.

Besides the Harveian Society there are several other

MEDICAL CLUBS IN EDINBURGH,

which, though they have in outward appearance no other purpose but convivial enjoyment, really serve much more important ends. So long as the convivial customs of society bordered on excess, such clubs were not free from the danger of sometimes tempting to an infringement of that strict temperance so imperative on the members of the Medical Profession; but now, even in Scotland, the old custom of prolonged festivity is universally more honoured in the breach than the observance, and with none more than among the members of the Medical Profession in Edinburgh. Hence the usage of meeting together in convivial union, several times a year, is wholly harmless as regards sobriety, while, by serving to unite a large body of Medical men as it were into one family, it is attended with the happiest effects. These convivial meetings are short and temperate; and our experience of their usefulness affords a strong recommendation for their introduction elsewhere, as a means of softening down the asperities that must needs arise occasionally, owing to the peculiarly delicate position in relation both to his

brethren and to the public in which every Medical man is placed.

The prevalence of this opinion here, at once decides that there are few of us who agree with

THE TEMPERANCE VIEWS OF DR. CARPENTER,

as declared in his newly published Prize Essay, that the example of total abstinence from vinous liquors is incumbent on the members of the Medical Profession. To conceive that total abstinence can ever become the rule among mankind at large is chimerical in the last degree; and if so, it is manifest that it cannot become the rule in that portion of society to which the members of the Medical Profession belong. But daily experience shows that, independently of any influence exercised by the abettors of total abstinence, temperance, for a long time past, has been gradually passing more and more into a fixed usage of society throughout the empire. There is still room, however, for the temperance of the educated classes being carried to a higher degree. How, then, is the right measure of temperance to be carried out in that portion of society? Not, surely, by the occasional appearance of a teetotaller at their convivial meetings. The singularity of the spectacle of a man drinking water, while his friends around are sipping their wine, has an effect entirely the reverse. On the contrary, the cause of temperance is never more truly promoted than when any considerable proportion of a company drink more moderately than had been the custom previously in the place, or on the occasion, of their meeting. And who are the men who are in a position to set this so valuable example of moderation at table? Certainly no other than those men, and those men only, who are likely to listen to Dr. Carpenter's persuasions in behalf of an example of total abstinence. And thus, if he succeeds in making all those persons teetotallers, who find it easy to confine themselves within the bounds of moderation, he takes away the effect of that example from those who most require it; he destroys the most powerful safeguard against excesses at table, for the present, as well as the best authenticated cause of future improvement. In short, as respects the society in which Medical men move, and which is best entitled to the benefit of their good example, to adopt the resolution of teetotalism, is like the monkish practice of estranging oneself from the world instead of setting a pattern to one's neighbours of the possibility of resisting its temptations. We would not discourage teetotalism among the labouring orders; nor do we object, so long as it is found to be necessary, even to that kind of moral slavery which those masters exercise who refuse to employ workmen who have not taken the pledge. Still we see no proper connexion between the circumstances which justify this renewal, in a measure, of slavery, and the demand of an example of total abstinence, on other grounds than those of health, from the educated part of society.

SELECTIONS FROM FOREIGN JOURNALS.

ON THE STRUCTURE OF THE CUTANEOUS GLANDS OF THE TOAD.

These are either solitary or aggregated. The solitary are chiefly found on the surface of the belly, and elsewhere in the interstices of the aggregated. The latter are found behind the ears, forming the glandulæ auriculares described by Müller; and especially on the hinder extremities. Here, on each side, there is a heap on the lateral peroneal muscles. Their situation is in the areolar tissue, which surrounds them on every side, and is perforated by their efferent ducts. Their form is generally round or oval, and each possesses a short efferent duct opening between the elementary cells of the epidermis. Freed from this areolar tissue, their microscopic analysis offers the following constituents: — Areolar tissue, unstriped muscular fibres, cerebro-spinal nerve fibres; and, on their inner surface, an epithelium consisting of round cells. The muscular constituent is arranged in the form of not very thick fibres, which divide and anastomose, so as often to give a deceptive appearance of cells. Their easy solubility in potash distinguishes them from the elastic element. These muscular fibres have been found by Kolliker in the sweat-glands of the hollow of the human hand. Sympathetic nerve fibres have not yet been seen. The fluid contents of the cell consist of a mass of small granules, but its chemical nature is not further known. Considerable arterial and venous twigs go to these glands, being derived from branches which course in the interstitial areolar tissue.

Irritation of the cerebro-spinal system of nerves, or of the muscular fibres, or of the glands themselves, produces the discharge of secretion; a fact which explains the import of their anatomical elements. If the toad be beheaded, the intestines removed, and the secretion which has already exuded carefully wiped off, an irritation of the divided and isolated sciatic plexus, by means of the rotation or electro-magnetic apparatus, will, in a few seconds, cover the whole hinder extremity, and especially the skin clothing the peroneal muscles, with new secretion. By a special experiment, the Author has found, that the fibres subservient to the discharge of the secretion lie in the anterior roots of the spinal nerves. The contraction of the wall of the gland itself has never been a matter of direct observation, probably from its small size. It is probable that the sweat-glands of man and mammalia possess a similar relation to the central nervous system. Several pathological phenomena, and especially the sweat which precedes death, corroborate this notion. Two cases from the Clinique of Professor Robert, may also be quoted towards this view. In a man who had suffered a severe contusion of the brachial plexus from a fall, the upper surface of the corresponding hand was continually sweating. In another case, a super-orbital neuralgia was accompanied with a great inclination to perspiration on the same half of the face.—*C. Eckhard in Müller's Archiv.* Pp. 424—429.

THE IRRITABILITY OF MUSCULAR FIBRE, AND ITS RELATIONS TO THE NERVES.

The Author's later researches fully corroborate those communicated by him in 1847. The collected nerves, which pass to the hinder extremity of the frog, were divided by a transverse section. The date and degree of the results vary considerably; but the following may be generally stated:—

1. That the muscles may preserve their susceptibility of the electric stimulus, as well as their normal conditions of structure, after the nerves which correspond to them have been cut across for more than six months; when these latter are no longer capable of being affected by electrical irritation, and when their primitive tubules also exhibit essential alterations of texture.

2. That the susceptibility for electrical irritation is sometimes, but not always, of longer duration in the muscles deprived of the nervous influence than in those which are still in relation with it.

3. That, uniformly, ulceration and gangrene occur in parts of an extremity which is cut off for a long time from the nervous influence; and that this is especially the case in the toes.

4. That such parts, after being attacked by ulceration and gangrene, heal over and become covered by normal skin.

5. That, perhaps, this reparative process stands in a causal relation with the integrity and unbroken continuity of the sympathetic filaments which pass to the nerves of the thigh.—*Dr. Stannius, in Müller's Archiv.* No. 5. Pp. 586—593.

ENCYSTED BRONCHOCELE.

M. Bouchacourt narrates in the *Bullétin Général de Thérapeutique*, several cases of encysted bronchocele treated by injection, and draws the following conclusions from the results of those cases.

1st. Among the plans of treatment recommended for the cure of encysted bronchocele, such as incision, partial excision, the seton, cauterization from without inwards, and the injection of an irritant fluid, we may have recourse to the last-named, with hope founded on success.

2nd. In his earliest operations he employed the tincture of iodine diluted with water, sometimes with a camphorated spirit; he now prefers the solution of iodine, such as M. Petrequin employs for hydrocele. By the addition of a certain proportion of the ioduret of potassium, the precipitation of the iodine, and the inconveniences caused by its deposit on the internal surface of the cyst, where it may act as an irritant, are avoided.

3rd. In the two cases published in 1844, suppuration was each time the consequence of the injection; and M. Bouchacourt, judging from his own experience alone, then thought suppurative inflammation necessary to effect a cure. M. Velpeau, out of the four cases related in the article "Goitre," in his work on the shut cavities, only once saw suppuration follow the injection. The injection of the tincture of iodine was practised twice; the patient suffered very little. In the course of nine days she left the hospital, there being only a hard and indolent nucleus in the place of the cyst, and the neck was straight. The cases M. Bouchacourt has since published afford several examples of cure without suppuration, the inflammation being merely adhesive, as in hydrocele, pleurisy, simple orchitis, &c. He is now of opinion, that the cure by adhesive inflammation should be regarded as the rule; that by suppuration as the exception.

4th. If the tumour contain heterogeneous elements; if it have thickened, knobbed, and indurated parietes; if the remainder of the gland be hypertrophied, so as to form a considerable mass, suppurative inflammation will be more serviceable, and it will be better to allow the injection to remain a longer time in the cyst, and even to leave a little in it to act as an irritant liquid, and as a foreign body. In such a case cauterization may be employed, either with Vienna paste, or with the paste of the chloruret of zinc, partly to localize and concentrate the diffused inflammation, and partly to destroy the portions of undermined skin and fistulous canals, and also to remove by sloughing a considerable portion of the cyst, as M. Bonnet has done several times with success.

5th. Together with the iodine injection, caustics, compression, &c., the action of discutients must often be combined, such as frictions with an iodine ointment, lotions, and the application of the *eau de Challes*, sulphurous baths, purgatives, &c.; also such other medicines as the state of the patient may indicate, as steel, aloes, quinine, saline, alkaline, or sulphurous baths.

6th. Not only does the cure of the cystic goitre remove for ever a frightful deformity, but it prevents, or often arrests other and more serious changes of structure, which are the almost necessary consequences, namely, the compression of the trachea and of the large blood-vessels. When the local lesion has been modified or cured, the neighbouring organs cease to be distended and compressed, and the disappearance or diminution of a tumour, involving a gland, the life of which is so obscure as that of the thyroid, is felt all over the system. The same consequences follow the extirpation of the tonsils in children, where serious lesions are prevented or cured by a very simple operation.

WILD BARLEY SWALLOWED AND EVACUATED BY AN ABSCESS IN THE GROIN.

M. Renault describes the case of a child, three years and a half old, who, having a wild barley beard in his mouth, it was carried by an involuntary movement of deglutition into the pharynx, causing symptoms of suffocation, but passing thence rapidly into the stomach. After that all the symptoms passed away, and the child took his supper very well. Shortly after, however, he had a rigor, followed by nausea and pain in the stomach, which continued all night. M. Renault was called in. The child's face was very pale and anxious; skin dry and burning; pulse small and weak, 140; abdomen tense, tympanitic and exceedingly tender; thirst null; no vomiting or diarrhœa. M. Renault looked upon the case as one of peritonitis, not having been informed respecting the swallowing the beard of barley. His treatment in that view of the case was very slight, and the patient did not improve, as the tenderness of the abdomen and tympanitis increased. He covered the part with a thick layer of mercurial ointment, and the tympanitic condition then sensibly diminished in the course of 48 hours. A small red tumour, hard and very painful, was then discovered in the right hypochondrium. This suppurated, and was opened, giving exit to half a cupful of pus. The abscess healed up, but the child did not get better; he was

still very pale and feverish, and the belly continued painful, especially at the lower part of the right side. A month after the beard had been swallowed, a new abscess formed about three fingers' breadth above the right groin. It was opened, and a large quantity of pus evacuated. It continued to discharge for two months longer, when the beard presented itself at the opening, and was extracted with some difficulty. From that day the child recovered. M. Renault omits to mention whether any fæcal matters came away through the abscess.—*Bullétin de Thérapeutique.*

NERIUM OLEANDER.

M. Larue Dubarry, referring to a paragraph in the *Répertoire*, stating that the experience of medical men in Africa proves that the neighbourhood of the nerium oleander, (the laurel rose,) while flowering, is dangerous to men and animals, states, that he has experimented carefully on this subject, and has slept for three nights in a small room, containing a great number of branches of the plant covered with flowers, the door and windows being shut, without suffering in the least. Dioscorides, Galen, Apuleius, Pliny, and Orfila, speak of the toxic properties of the nerium when taken into the stomach, or applied topically to the cellular tissue, but not one of them alludes to any danger to the animal economy from its odour. M. Dubarry, in 1841, saw five men poisoned by some barley soup, which had been stirred, while cooking, with a stick of the nerium; and, in 1845, he published the case of a horse poisoned by the same substance applied externally. The odour of the nerium is very faint, but very agreeable.—*Journal de Chimie.*

REMEDIES FOR PSORIASIS.

M. Emery states that the arsenical preparations, especially Fowler's solution, are the best internal remedies, and pitch ointment, made with one part of pitch and three of lard, the best external remedy in psoriasis. These two remedies, employed together, constitute the best plan of treatment for that disease. He never gives more than ten drops of Fowler's solution in the course of the day, and has rarely found it hurtful. He has observed while using both these remedies together, which he did on the recommendation of Cazenave, that the disease is cured in two different ways at the same time. The scales of the psoriasis are effaced by the pitch from the circumference to the centre, while, by the action of the arsenic, they diminish in thickness, and assume a grey-black colour. The ointment of the proto-ioduret of mercury, prepared with two scruples of the salt to four ounces of lard, may be very serviceable, when it is properly used, but it occasionally causes salivation. The next preparation in utility is the ioduret of sulphur. This is made into an ointment with lard, in the proportion of from one to four scruples of the ioduret to four ounces of lard. It is said, however, to be very irritating to the skin, and even to have induced an attack of erysipelas, when made of the full strength, *i. e.*, with four scruples to four ounces. M. Emery tried baths containing seven drachms of the bichloride of mercury in each in twenty-two cases, and persisted in their use for some time, but without benefit. Very violent symptoms were produced by the baths in some cases, and evidences of salivation. Undaunted by the failure, the baths being recommended by a medical man of high reputation, M. Emery again experimented with them on twenty other patients, eight being cases of lepra vulgaris, four of psoriasis affecting the knees and elbows, four of psoriasis guttata, and four of psoriasis of the limbs and body; some of these could not continue up to the twelfth bath; they lost their appetite and their rest, and the skin became very irritable. Others persisted to the thirty-second bath; but they slept badly, lost their appetite, and became emaciated. A boy, fourteen years old, after taking the nineteenth bath, was seized with vomiting and cerebral symptoms, with signs of compression, which were removed by applying two leeches behind the ear; but a nervous trembling of the head and limbs continued for four months afterwards. In none of the cases of psoriasis was the disease cured, and in four it got remarkably worse. At M. Emery's request, M. Gibert, one of the physicians to St. Louis, also tried the baths, with the same want of success. He employed them in fifteen cases.

M. Emery employs the arsenic and pitch ointment in the following manner:—The patient takes a bath, and the moment he leaves it, he gently rubs in the ointment on the part affected. This is repeated three times a day. At the end of two or three days, he increases the quantity of ointment used, and the activity of the friction. After six or seven days, the patient always has the ointment on him; and when the disease is of old date, M. Emery covers the large patches with compresses spread with the ointment a line in thickness. The patients take a warm bath once or twice a week. This treatment rarely requires to be suspended, except in those persons whose skin is very irritable, on whom some pustules of impetigo or small boils may form. They often continue the treatment, notwithstanding. In the course of ten days in psoriasis the scales have fallen; a whitish circle surrounds them, and goes on increasing from the circumference to the centre. This shows the decrease of the disease, which generally disappears in two or three months, without the patient's health suffering. In lepra vulgaris, the centre separates, and the rings which constitute the rounded chain come away, and then behave like the patches of psoriasis.

The exhibition of Fowler's solution requires precautions. Five drops should be given at first in four or five ounces of *eau sucré* in two doses. This is to be increased one drop every second day, until twelve are given, unless dangerous symptoms supervene. When the patches become less thick, and begin to assume a blackish grey colour, the dose need no longer be increased, these symptoms being a sign of saturation. If, on the other hand, these signs do not appear, and the patient bears the medicine well, it may be increased to 15 or 16 drops, but rarely to more.—*Bullétin de Thérapeutique.*

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THE MEDICAL TIMES.

SATURDAY, MAY 4, 1850.

It is clear that the Council of the College are thoroughly demented and lost. We had expected, up to the latest moment, that they would have reconsidered their late "Resolution," and conceded something to the just demands of the members; but we have been most grievously disappointed. They have recently transmitted their final answer to Sir George Grey, together with a copy of "Resolutions," setting forth the alterations of the Charter which they recommend. These Documents are published in another column.

On reviewing these Resolutions, we are penetrated with mingled feelings of indignation and grief, and know not how to give adequate expression to our surprise. Nothing that the Council has ever published is more exclusive in its sentiments or insolent in its tone. Written in many parts with an affectation of phraseology perfectly meaningless, the Letter betrays an effort to conceal its illiberality in the garb of a general philosophy, indicated rather than expressed by scholastic phrases and metaphysical platitudes. We admire abstract philosophic writing, but it must be intelligible. Such trivialities as these are scattered through the document,—"Wherever, as in the Metropolis or other large towns, the requisite conditions are present, the primary and immature state of the Profession represented by general practice is superseded, more or less, by the distinctions of Physician, Surgeon, Obstetrician, and Pharmaceutist, without, however, violating the obligations which, consisting in the recognition of the same fundamental principles, maintains the common professional unity of all." What can the Council mean by "fundamental principles" and "professional unity?" Our ideas, as expressed by these words, are precise; but, coming from the Council of the College, they are mere balderdash, phrase-making, and deception. The Council have been trying to write *up* to the General Practitioners; but the General Practitioners will write them *down*.

Reserving, however, our comments on the Letter until another occasion, we shall now devote some space to an examination of the "Resolutions."

The 1st Resolution is,—

"That members of the College, at the date of the Charter of Her present Majesty, and of TWENTY *years'* standing, be admitted to the Fellowship; and that the mode of admission be by the recommendation of SIX FELLOWS, the payment of TEN GUINEAS, and the VOTE or BALLOT of the COUNCIL!"

We have, on former occasions, condemned this Resolution; but in its terms it is now worse than it ever was, and ought to be reprobated by every surgeon in the country. It is bad enough to restrict the Fellowship to members of twenty years' standing, to put them to the trouble and humiliation of seeking a certificate of moral character and professional skill from six Fellows, and to further tax them with the payment of a fee of Ten Guineas. The Council, however, do not seem to think that these restrictions are sufficient; but that, after all the conditions have been complied with, the Candidates shall be submitted to a Ballot of the Council, who reserve to themselves the right of excluding any member whom they may please from the *Fellowship*. Neither the members are to be permitted to elect for the Fellowship, nor even the Fellows, but the *Council* themselves! who will thus have a veto upon every claim, and reserve in their own hands almost the entire power of the College. No law of a more oppressive tendency was ever contemplated, even by the most unjust and arbitrary of Councils. Besides this, we are left in utter ignorance of the mode of employing the Ballot against a candidate; whether, for instance, the decision shall be given by a majority, or whether one, two, or three black balls shall be deemed sufficient to exclude a member from the Fellowship. The object of the Council clearly is to limit the number of Fellows.

The 3rd Resolution is,—

"That no Fellow of the College shall be eligible to a seat in the Council unless he shall have been a member of the College for *twenty* years, or a Fellow for fourteen years."

We could hardly expect easier terms for the Council than are appointed for the Fellowship.

The 5th Resolution is badly expressed, and is unintelligible, unless compared with the 10th; but we can expect neither good grammar nor good conduct from this Council. It speaks of the "election of *Members into* the Council," as if such were the fact; but the 10th Resolu-

tion defines the sense more accurately by providing for the "election of FELLOWS INTO the Council," which is the sense intended by the former Resolution. The schoolmaster has been abroad for many years, but he has not yet found his way to the Royal College of Surgeons. The Council are prone to accuse the Members of not being duly instructed in the English language; but the Members may return the *retort courteous* with more evidence of truth.

The 6th Resolution is as follows:—

"*6. a.* That EVERY *eligible Fellow* desirous of becoming a candidate for a vacant seat in the *Council* shall signify the same to the Secretary, transmitting with such notice a certificate according to the following form, signed by six Fellows, viz.:—

"*b.* To the President and Council of the Royal College of Surgeons of England.

"We, the undersigned Fellows of the Royal College of Surgeons of England, do hereby certify, on our own personal knowledge, that A. B. of C. *does not practise*, and has not at *any time during five years preceding this date practised Pharmacy*, either directly or indirectly; that he NOW RESIDES and *bonâ fide* PRACTISES his Profession of a Surgeon *within five miles*, by highway or road, from the General Post-office in St. Martin's-le-Grand; and that he is in our estimation a fit and proper person to be a Member of the Council of the Royal College of Surgeons of England, and we do hereby nominate him a candidate for a seat in the Council."

With a constrained sobriety of tone at which our feelings revolt, we ask the Surgeons of this country if they will be satisfied with this most iniquitous and degrading Resolution? A Resolution that excludes from the Council of the College of Surgeons—not of *London*, but of *England*—the most learned anatomist and skilful surgeon in the provinces, no matter how great his discoveries or high his repute, must surely awake the unanimous ban and execration of this insulted body! If this Resolution be accepted and acted on by the Government, the new title of the College of Surgeons will be a glaring imposture, as the Institution will resolve itself into a mere club of London lecturers and Hospital Surgeons.

What now will the Surgeons of Manchester, Leeds, Birmingham, Bristol, and other large provincial towns, say to the liberality and returning sense of justice of the Council of the College? Can Mr. Soden, with any truth, hold out expectations to the assembled Surgeons at Bath of a reform of the College, consonant with the hopes and interests of his auditors? The Council, far from advancing in the course of reformation, have actually receded from the position they occupied on the 4th of February last, and are grown more illiberal, more obstinate, and more perverse.

We cannot pass over the 14th Resolution, which,—as all present Members of twenty years' standing will be eligible to the Fellowship without examination, but subject to the vote of the Council,—can only come into effectual operation after twenty years shall have expired,—by which time we hope the Charter, if obtained, will be a dead letter:—

"14. That the Council shall have the power to elect to the Fellowship annually, without examination, under such conditions as they may establish by bye-law, TWO Members of the College of not less than twenty years' standing, on payment of the usual fee."

What a gracious condescension to distinguished Members of the College is contemplated by this Resolution! Instead of admitting ALL Members of twenty years' standing to the Fellowship, the Council will magnanimously elect TWO!! annually to this important and honourable order! But, enough, for this week, of these scandalous Resolutions.

DEPUTATION TO SIR GEORGE GREY.

THE Deputation appointed by the Public Meeting recently convened by the Council of the National Institute, had an interview on Thursday last with the Right Honourable Sir George Grey, for the purpose of supporting the prayer of the Memorial adopted by the Meeting. The Deputation set forth the claims of the General Practitioners at considerable length, and enforced the necessity of establishing a new and Independent College, as the only means of accomplishing any satisfactory arrangement of the question of Medical Reform. The Deputation acquainted Sir George Grey with the results of their recent convass of the Profession, and clearly showed that among the General Practitioners there had been no variation of opinion since the original adoption of their policy, but that, on all occasions when the Council of the Institute had appealed to the Profession, they had discovered a large majority in favour of a separate incorporation. Sir George Grey listened to the statements made by the Deputation with much interest and urbanity. The recent resolutions of the Council of the College of Surgeons also underwent discussion, and they were declared by the Deputation to be most unsatisfactory.

We shall give a fuller report next week.

A Deputation from the Council of the Provincial Association and its branches, had also an interview with the Secretary of State on Thursday last; but we are constrained to defer a report of the details to another opportunity.

THE POSITION OF THE COLLEGE OF PHYSICIANS.

THE College of Physicians is an old-established Corporation. It has been great—eminent; it still carries with it the prestige of former grandeur. The non-professional public still look up to it with respect. It still has with it the lustre of great names. Its Fellows and Licentiates only, by virtue of enactments made in olden times, are eligible to many Hospital and Dispensary appointments. The Executive of the College has yet many a gift to bestow, to reward its followers and enrich its members.

But how long will this influence exist? Is not the hostile cry already raised against the College? Do not its empty coffers threaten a catastrophe? How is it, that in London, out of some 350 Physicians in practice, more than one-third do not belong to the College? How is it that many M.D.s, men of eminence, though not members of the College, are attached to Hospitals and Dispensaries, and practising more extensively than many a privileged Licentiate or Fellow? How is it that many, whom the distinguished Members of the College refuse to meet in consultation in higher quarters, are retained, while they themselves are dismissed? How is it that many, not members of the College, are appointed professors and teachers of the rising generation? How is it that all are enabled to set the College at defiance, to disregard its Charter as an obsolete fiction, to brand it as a poverty-stricken Institution which has neither the monied means nor the power to enforce its privileges.

Opposed by every University in the realm, and compelled to accede to the demands of every Medical Corporation or Association with which it comes in contact, its weight with the Government is paralysed. It remains a noble monument of by-gone days,—a theoretical pillar of the Profession, the disunited masonry of which is crumbling into ruins.

These are speaking facts, but easily explained. The Council of the College do not remember that the spirit of the times is changed; that the competition among Physicians is great and daily extending; that merit, apart from patronage, must and will have its sway; that the public Press will not, out of respect for ancient authority, be silenced; that the sentiments of intelligent men are not to be tied down by the prejudice of antiquity, or old-established privileges, especially when these are illiberal and unjust. The combined interest of other Physicians must, if opposed, cause the overthrow of the resisting London Corporation.

For how can it be supposed that about 180 Fellows—for this is the outside of their number—shall hold unlimited jurisdiction over all the Physicians of this Metropolis or realm? They may, perhaps, nominally rule over some 260 Licentiates, and as many Extra-Licentiates, scattered through the world, who fancy it may not be for their interest openly to resist. But is it not presumptuous, on the part of a Corporation like the College, upwards of 100 members of which have no degree,—many of whom do not possess either the same amount of literary reputation or medical practice, as those over whom they strive to rule,—in many instances the juniors,—to pretend that they only shall have the right to give men who have already obtained a degree, after a fair and searching examination, the legal right to practise as Physicians in this city, and that, not till they shall have submitted to a vexatious and elementary examination.

In justice to the College, it should be confessed, that they themselves have admitted the superannuation of their privileges; they have framed another Charter, and it is comparatively liberal. But, if the College does not wish to complete the disruption of what ought to be a united Profession, if it does not seek as its object to arrest, or at least to cripple its own progress, it should act in a still more liberal spirit, with promptitude and with decision. This useless delay can do no good. It is unbecoming a great Institution; and, *in the face of the Government declaration, that it will not grant the College a new Charter till all parties are agreed*, it is most unwise. As the Metropolitan and older Institution, it should take the initiative. It should at once put itself into communication, not in a spirit of contention, but of conciliation, with the other Colleges of Physicians and with the Universities. It might keep, in common with the latter, the right to examine and license Medical candidates, but not to confer Degrees. More especially, and with a view of doing justice to and obtaining the support of a most influential

party, it should agree to admit at once, at a moderate premium and without examination, those Members of the Profession practising as pure physicians throughout the country, and who, having obtained a Medical Degree from a British University, or obtained the Fellowship of other British Colleges of Physicians, offer to the world a presumption of their qualification.

The same principle has been adopted in all large continental capitals, where there is a College of Physicians, and has invariably been found to work well. Let the London College likewise, in a fair and honest spirit; let it gladly embrace the opportunity, and give an example of moderation and justice to other Medical Corporations, and that before the present Session of Parliament is over. In this way, and under a more extended representative Government, it will conciliate all physicians, assume that high position which properly belongs to it, and which wealth, talent, and a united moral power alone can hold, and, in the universal satisfaction which it will give, bid fair to raise its character and reputation to a pitch which, in its palmiest days, it never attained.

CORONERS' COURTS.

We find that the County Magistrates, throughout the country, are following the example of the Middlesex Justices, and scrutinising with some rigour the accounts of their Coroners. The Coroner for the honour of Ampthill, Bedfordshire, repudiates the interference of the County Magistrates in his case, and asserts that he is the only person qualified by law to determine the propriety of holding an inquest; and, of course, to levy as large an income on the county as he pleases, limited only by his opportunities. The letter in which this right is set forth is clever, and, if it be correct in its views, shows that Coroners are virtually irresponsible for the exercise of their powers. As we have before said, we now reiterate, that it is become necessary to pay Coroners by a fixed salary; and thus, while they are equitably remunerated for their services, they will not lie under the suspicion or imputation of making an improper use of their opportunities to minister to their own gain.

WATER SUPPLY.

The supply of water to the Metropolis has now received that share of attention which usually portends some legislative enactment. Enormous blue-books have recorded its demerits; it has been denounced by Sanitary Commissioners; condemned by the Registrar-General; thundered at in the *Times*, and gently anathematized in Dickens's "Household Words." Its chemical constituents have been determined by Ure; its microscopical elements described by Hassall, and both have been long practically recognized by all unlucky individuals, whose vows have compelled them to gulp the London Representative of the "pure! element," instead of disguising it with malt, or flavouring it with brandy.

The indictment laid against the Water Companies, of impure source, limited supply, and partial distribution has then been proved, and something must shortly be done by way of remedy. No change can be made this session or next; but eventually no one can doubt that the unanimous demand of the public will force the Government to interfere materially with the privileges of these great monopolies.

It is on all accounts, however, desirable that Government should not legislate prematurely in this matter. Abundance, cheapness, and purity are the things needed; and, if they can be insured, a little delay can be very safely borne. The primary and fundamental point to be decided, is the source of supply; and the determination of this is impossible, until it be seen whether the Thames can or can *not* be freed from the various impure tributaries which now so fatally contaminate its waters. If the sewerage of London, and of the other towns situated on its banks, can be diverted from the Thames, and if an abundant supply can be drawn from above that part of the river disturbed by navigation, then there is every reason to suppose that the Thames itself will afford the most convenient, most abundant, and, with a little care, purest supply, which can possibly be obtained, without an enormous outlay. If the stream which so conveniently bisects the Metropolis can be purified, any gigantic scheme of bringing a river into London by means of tunnel or aqueduct may be at once dismissed as both expensive and unnecessary.

The sewage question must, then, be decided before the source of supply of London water can be fixed. All debates on this latter point are at present a waste of time. When it has been proved, that our river cannot be cleansed, we can then consider whether water should be brought from Henley or Watford, or be pumped out of the bowels of the earth from beneath the London clay.

There is one point, however, which can at once most profitably be brought under debate. When the source of supply has been determined, and the requisite purity and abundance guaranteed, it is to be considered how the distribution can be made with the greatest amount of benefit to the public. We can suppose that the Government may either enlarge the powers of the present Companies, or create other Companies, or merge all into one giant administrative body, which may ensure equality of distribution in all parts of the Metropolis. But, whichever plan is adopted, it is to be hoped that this essential necessary of life may not be used simply as a means of money-making, by trading Companies, whose only principle of action is the greatest profit at the least expenditure. The usual means by which Government of late years has been contented to obtain the due rights of the public, without interfering with private enterprise, has been by giving full play to the principle of competition. It is by the unrestricted action of this principle, that our manufacturers furnish the public with such an unexampled supply of cheap and excellent goods. But this method is hardly available in a case like the present, and the history of the Water Companies of London has taught us that free competition has been found ruinous to the competitors, who have invariably been ultimately compelled to amalgamate, to the great detriment of the public generally.

In all those cases in which the principle of competition becomes impossible, the public can only be protected by constant supervision and superintendence. It is the duty of a State to exercise this superintendence, or to authorise the public to exercise it for itself. How best this supervision can be made, and how the rights of the public and the Water Companies can be equally maintained, is a question which can only be answered by a reference to the real duties of a governing body, and the freedom of action which private enterprise so justly demands.

We shall shortly return to this subject, and consider in what mode a proper and impartial supply of water to London could be best secured, supposing the source of supply had been previously fixed.

METROPOLITAN INTERMENTS BILL.

This Bill has now been read a second time, and it is probable that it will not receive any material alteration in Committee. We are willing to accept it as an instalment of what is due to the public, and it is in no spirit of opposition that we offer the following remarks upon its provisions. We must, in the first place, declare our conviction that the proposed measure does not provide with sufficient precision for the abolition of intramural sepulture. We are well aware that old burial-grounds cannot be closed, or new ones opened, by the waving of a wand, but we think that the Government had sufficient information to justify the insertion of a clause in the proposed Act, rendering it imperative that the most offensive of the metropolitan grave-yards should be finally closed within a very short time. As the Bill stands, its success or failure must depend entirely upon the Board of Health, and unless the members of that body (which, from henceforth, is to enjoy the title and privileges of a Corporation) shall be of opinion that interment in any particular place ought to be discontinued, and shall so report to Her Majesty, the abominations of the present system may be prolonged indefinitely. A glance at the Bill will show what reliance has been placed on the wisdom of the Board of Health. It would seem, however, that its constitution is to remain the same as formerly, the Crown being empowered to appoint an additional member; and there is no safeguard against the commission of blunders as great as have signalized its former career. The corporation is to appoint an Assistant-Secretary, a Treasurer, clerks, officers, wardens of burial-grounds, grave-diggers, servants, &c., the only limitation to its patronage being, that the unexpired period of its own existence, as fixed by the Public Health Act of 1848, is also to be the term of service of the new officials, unless cut shorter by the fiat of the mighty Board. Officers having been appointed, the Board are to find offices, and then they are enjoined to provide, from time to time, "in such places as, having regard to the public health, may appear to them expedient, and either within or without the limits of the (metropolitan) district, burial-grounds of sufficient extent for the decent interment of the bodies of all persons dying within the district." These last words of the Act would seem to imply, that the intention of its

framers was, that existing graveyards should be closed; but it is provided by a subsequent section that there must be an Order of Council for the discontinuance of interment in any burial-ground, and before such an order can be issued there must have been, as we have already intimated, a Report from "the said Board," signifying their opinion that such interment ought to be discontinued. These are the main provisions of the Bill. Some unnecessary alarm seems to have arisen as to corpses becoming, as it were, the property of the Government. Were such a provision necessary we should give it our support. *Salus populi suprema lex esto.* But the Bill contains no such enactment, nor do we see any need for it. It is not proposed to deprive persons of the privilege of burying their dead after their own fashion, subject to certain contingent restrictions to which no reasonable person can object; but the Board are required to make provision for the management of funerals in burial-grounds established under the Act, "where the persons having the care and direction of such funerals desire to have the same so conducted;" and a scale of charges is to be published, which will, probably, in many cases, lead parties to prefer the Board of Health to an undertaker. But these are matters of minor importance. The first duty of the Board will be to find proper burial-grounds, and as soon as possible to advise the Crown to shut up the present seedbeds of cholera and fever; and for the due performance of this duty, sound practical and, let us add, medical knowledge is required, which has not hitherto been shown by these trustees of the public health. We reserve our observations on the constitution of the "General Board of Health" until a future opportunity.

RESOLUTIONS OF THE COUNCIL

OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND, RESPECTING CERTAIN ALTERATIONS DEEMED NECESSARY IN THE CHARTERS AND BYE-LAWS OF THE COLLEGE; AND TO WHICH THEY REQUEST THE SANCTION OF THE SECRETARY OF STATE FOR THE HOME DEPARTMENT.

1. *a* That members of the College at the date of the Charter of Her present Majesty, and of twenty years' standing, be admitted to the Fellowship; and that the mode of admission be by the recommendation of six Fellows, the payment of ten guineas, and the vote or ballot of the Council.

b. That the following be the terms of such recommendation:—

"We, the undersigned Fellows of the Royal College of Surgeons of England, do from our personal knowledge of the high moral character and professional attainments of A. B. of C. declare that in our opinion he is deserving of the honour of the Fellowship, and that he does not openly trade in medicines. We therefore recommend the said A. B. to the Council to be admitted a Fellow of the College.

c. That Members in the Army and Navy be admitted to the Fellowship under the like conditions, their certificate and recommendation being to the same effect, and signed by six Fellows, or by the heads of the Medical Departments of the respective Services.

d. That Members in the Service of the East India Company be admitted to the Fellowship under the like conditions, their certificate and recommendation being to the same effect, and signed by six Fellows, or by the Secretary of the Military Department of the Company.

e. That Members resident in the Colonies be admitted to the Fellowship on the like conditions, their certificate and recommendation being to the same effect, and signed by six Fellows, or by the Governor of the Colony, and certified by the Colonial Secretary.

f. That the application of every Member for admission to the Fellowship, in the manner above provided for, shall be accompanied by a declaration signed by himself that he does not openly trade in medicines.

g. That this Council do, from year to year, admit to the Fellowship, by vote or ballot, under the foregoing conditions, the Members of the College at the date of the Charter of Her present Majesty as they shall respectively become Members of twenty years' standing, until the whole of the list of Members of that date shall be gone through.

2. That Fellows of the College practising midwifery shall not be ineligible to the Council.

3. That no Fellow of the College shall be eligible to a seat in the Council unless he shall have been a Member of the College for twenty years, or a Fellow for fourteen years.

4. That all vacancies in the Council shall be filled up annually in the month of July, unless at any time the Members of the Council shall be reduced below eighteen, in which case the Council shall direct a special meeting of the Fellows for the filling up of the said vacancies, at such time as the Council may judge proper.

5. That the day appointed for the election of Members into the Council, with the number of vacancies therein, shall be announced in the London Gazette, and in such other manner as the Council may direct, such day not being less than thirty days and not more than forty days from the publication of the London Gazette in which the said meeting shall be announced.

6. *a.* That every eligible Fellow desirous of becoming a Candidate for a vacant seat in the Council shall signify the same to the Secretary, transmitting with such notice a certificate according to the following form, signed by six Fellows, viz.:—

b. To the President and Council of the Royal College of Surgeons of England:—

We, the undersigned Fellows of the Royal College of Surgeons of England, do hereby certify, on our own personal knowledge, that A. B. of C., does not practise, and has not at any time during five years preceding this date practised Pharmacy, either directly or indirectly; that he now resides and *bonâ fide* practises his Profession of a Surgeon within five miles, by highway or road, from the General Post Office in St. Martin's-le-Grand; and that he is in our estimation a fit and proper person to be a Member of the Council of the Royal College of Surgeons of England, and we do hereby nominate him a Candidate for a seat in the Council.

Dated this day of 18 .

c. That such certificate and nomination shall be invalid, unless received by the Secretary within fourteen days from the publication of the *London Gazette* in which the meeting of the Fellows shall be announced.

d. That every eligible Fellow desirous of becoming a Candidate for a vacant seat in the Council shall transmit, together with the certificate of six Fellows, required by the foregoing resolution, a declaration signed by himself, that he does not practice, and has not at any time during the five years preceding the date of such declaration, practised Pharmacy, either directly or indirectly.

7. That should any certificate or declaration required by the foregoing resolutions contain any untrue statement, the Fellow to whom the same shall apply, shall, if elected, be removed from the Council.

8. That the nomination of Candidates by any one Fellow shall not exceed the number of vacancies to be filled up; and should any Fellow nominate a greater number of Candidates, such Fellow shall not be allowed to vote at the election.

9. That the list of the names of the Candidates thus nominated, with the names of the six Fellows by whom they shall respectively be so nominated, together with a notice of the day appointed for the elections, shall be transmitted through the Post Office to each Fellow in the United Kingdom whose residence shall be known to the Secretary.

10. That the voting for the election of Fellows into the Council, shall be by marked lists; and every Fellow shall be at liberty personally to deliver in at the meeting appointed for the election the list of candidates forwarded to him, as before directed, or to transmit such list to the Secretary, provided the same, if transmitted, shall be received by the Secretary two clear days before the day of election.

11. That Fellows voting as above for a greater number of candidates than there shall be vacancies to be filled up, will render their respective lists or voting papers invalid.

12. That the names of Members of the Council going out of office by rotation shall, if they are desirous of re-election, be placed at the head of the list of candidates; and, if re-elected, shall take precedence of all others elected into the Council on the same day, and shall, with respect to each other, take precedence according to their former seniority on the Council.

13. That the Examinations for the Fellowship shall be held twice in the year, at such times as the Council may appoint; and that the Court of Examiners be authorised to hold special or extraordinary meetings for such Examinations whenever the same may be found necessary.

14. That the Council shall have the power to elect to the Fellowship annually, without examination, under such conditions as they may establish by bye-law, two members of the College of not less than twenty years' standing, on payment of the usual fee.

15. That all Fellows hereafter elected to the office of Examiner shall go out of office at the end of five years from the time when he may have been elected, but the Council shall have the power of immediately re-electing; and, if re-elected, he shall take precedence in the Court according to his former standing as a member thereof.

By order of the Council,
EDMUND BELFOUR, Secretary.

April 23rd, 1850.

MEDICAL REFORM.

PETITION FROM THE GENERAL PRACTITIONERS OF REIGATE.

To the Right Honourable and Honourable the Commons of the United Kingdom of Great Britain and Ireland, in Parliament assembled,

The humble Petition of the undersigned, members of the Medical Profession, residing and practising at and in the neighbourhood of (Reigate),

Showeth,—That a very large majority of the Profession, the General Practitioners of Medicine, Surgery, and Midwifery, from the absence of any bond of union, or any legally authorised Executive to represent them, have for many years past been placed in a position of the greatest embarrassment and humiliation; that owing to this radical defect, and the want of sufficient influence with the existing Medical Incorporations, they have hitherto been unable to obtain a recognition of their claims to corporate rights and privileges, or protection from illegal and unprofessional practice; privileges which they believe to be essential to the public welfare, as also to the utility and dignity of the Medical Profession.

Your Petitioners, therefore, most respectfully pray for an Act of Parliament, incorporating the General Practitioners of England and Wales into an independent Royal College, including, in the first instance, all those individuals at present practising as General Practitioners of Medicine, Surgery, and Midwifery, with a representative government, and equal rights and privileges for all its members; to give authority to regulate the education, and test by examination in every branch of Medicine and Surgery, all future candidates for its membership.

That the three branches of the Profession, Medicine, Surgery, and Midwifery, being exercised by the same Practitioners, they are the Medical advisers, in ordinary, of by far the greater part of the population of the country, whose health, comfort, and well-being depend, therefore, on the competency and skill of those to whom they look up for counsel and assistance under the various forms of disease which occur.

Your Petitioners, therefore, submit the national importance of this subject to the serious consideration of your honourable House.

That the public welfare will be essentially promoted by the enactment, with as little delay as possible, of such a measure of legislation as would effect the beneficent objects in view, namely, the conservation and improvement of the public health, through the institution of a College of Practitioners in Medicine, Surgery, and Midwifery, with the agency of a perpetually increasing degree of skill, judgment, and knowledge in the members thereof.

ANDREW SESSON.	PETER MARTIN.
JOHN STEELE.	W. H. SARGANT.
EDWARD BOULGER.	THOMAS MARTEN.
W. T. SARGANT.	THOMAS SMITH.
HENRY HARRIS.	

KING'S COLLEGE, LONDON.—Halel Risk Allah, who has been for some time studying medicine in this country, was elected on Friday, April 26, an associate of this College.

CORRESPONDENCE.

PROVIDENT OR SELF-SUPPORTING DISPENSARIES.

[To the Editor of the Medical Times.]

SIR,—I see in your number of April 20th a reference made by Dr. Routh to the Coventry Provident Dispensary, in which notice there appears a considerable falling off in the Free Members' subscriptions. Now, lest it should be judged that this falling-off arises from want of management or interest in the Institution itself, or from its decay, and approach to the downward course so many others have taken, may I be allowed to state its principal cause? It arises from the loss of many of the clubs. Until the last few years, I am given to understand that the Medical men in Coventry refused to attend the clubs, but very lately there has been an accession to the Medical practice of some five or six young men, all dubbed Doctors (M.D's), who have competed with each other for the club practice, doubtless rather glad to have any kind of material to practice upon. One gentleman, also, previously connected with our Hospital, has started a Dispensary on his own account, charging considerably lower than the usual rate of a penny a week. The members of clubs generally prefer to be attended by a private Practitioner, to wait upon him at his private residence, rather than to make application at the Dispensary, and frequently wait for hours in the public room there. You will observe, however, that although the free members' subscriptions have fallen off, principally from the cause I have mentioned, yet the efficiency of the Institution has been very little impaired; for although the contributions have somewhat decreased, still the number seeking relief and requiring attendance is much the same.

It ought also to be mentioned, that the establishment of an Hospital here has interfered with our Dispensary, as a great many out-door tickets are distributed from that Institution; many more than from the eleemosynary Dispensary to which it was joined. Also, I find upon inquiry that the free members, and many of the clubs, have been allowed to get considerably in arrears in their payments.

Sir, I have been connected with the Coventry Provident Dispensary, as one of the Managing Committee, for the space of nineteen years; and perhaps you will allow me to add a few words in testimony, from my own experience, of the value of such Institutions. I should not have thought any testimony to this effect necessary, believing their utility to be universally acknowledged, if I had not seen, in this week's *Lancet*, some leading remarks, headed "Self-supporting Dispensaries a Mockery, a Delusion, and a Snare." Now, Sir, if this is a sample of that Editor's usual carefully considerate mode of pronouncing upon difficult questions, I can only say, that if he is a Medical Practitioner, I should consider my life very unsafe in his hands. A more blustering, swaggering, unsupported tirade I never read, and I would not trust his *lancet* to dissect a German sausage, much less any *subject* of more complicated human interest. Nineteen years' observation of the Provident Dispensary here has taught me to regard it as the most useful charitable Institution we possess; and many are the poor families I could point out to you, who would gladly and with truth admit, that it has been the foundation of all their prosperity; that it has saved them from the workhouse and from ruin; and that they date their first return to health from the time when they ceased quacking themselves and their children at the chemist's, and were regularly attended at the Dispensary. The Coventry Dispensary is not a "beautiful theory," as such Institutions are asserted to be by the Editor of the *Lancet*, but a fact of nearly twenty years' standing; and it was made a fact without the aid of the Medical men; for, so great was their opposition at its establishment, that not one in the town could be found to connect himself with the Institution, and we were obliged to go elsewhere for our Medical staff; yet we have gone on and flourished in spite of many side-winds to get rid of us. So much for the opposition of the Faculty, and the signal defeat which doubtless the *Lancet* would say we then met with. If the system were to be tried by the Profession, there is little doubt but its defeat would be "signal and humiliating," as Medical men have hitherto erroneously considered it as opposed to the interests of their private practice. We have not found it difficult, however, to exclude parties from the benefit of the Institution, who could afford to pay, and who ought to pay the regular Medical fees. A Committee monthly examines the claims of the candidates for admission, and where there is any doubt of their eligibility the strictest inquiry is made. Is the applicant for admission one whom it is desirable to assist in the payment of his medical bill? is the consideration by which we are influenced; and this is so easy of solution, and the rule used by us so stringently, that it is certain no injury results to the Medical Profession. The term "self-supporting" is certainly not literally applicable, as the honorary subscriptions ought to cover the expenses of management; and knowing, therefore, that the term was open to the quibble which the *Lancet* has raised upon it, we many years since changed our name from Self-Supporting to Provident Dispensary. This Institution is, of all others, based upon the right principle, inasmuch as its object is *to help the poor to help themselves*, to make them self-relying and independent—the only proper kind of charity. A man subscribes his penny a week, and one halfpenny for each of his children, up to a certain number, the rest being attended gratuitously; and he has not to go about BEGGING for an hospital or other ticket; but, when sickness comes, he claims the attention of his own medical man. He does this at once, whilst the disease is readily curable, instead of first drugging himself with quack medicines, and then wasting strength, time, labour, and *character*, in begging for a charity-ticket, often without success. Ought we to aim at rendering the poor self-relying and self-dependent, or force them, cap-in-hand, to be always awaiting the bounty of the rich? They who advocate the former will encourage the Self-supporting Dispensaries; for the term "self-supporting" always had more reference to the characters of the free members of which they were composed, than to the independence of the Institutions of honorary support.

Coventry is cursed with more charities of a purely eleemosynary character than most other towns, and I have had ample opportunity of witnessing their demoralising influence. Take the "Lying-in Charity" as an illustration, in support of which so much *dancing* is done annually throughout the country. Our object is to encourage providence and forethought, and the habit of making little weekly savings tends, above all things, to foster their virtues; here, in the case of the expected birth of a child, is ample time and inducement given to commence this moral discipline; but, no, Nature's schooling is thwarted, and the charitable lady steps in with her lying-in ticket! This ticket is trusted to, instead of the providence and forethought which, in so many months might have been confirmed into a habit; and what is the consequence? Two, at least, out of every three who trust to being able to procure these tickets are disappointed, and not only miss the lesson Nature intended for them, but are thrown into a state of distress from which many of them never rise. Without providence and forethought, without the daily, the hourly habit of self-denial, the poor have no chance of any degree of real comfort or well-being; and these virtues, so hard to practise, can be best attained when the consequences from the neglect of them are certain and undeviating. Nature's penalties are always sure and salutary, but we step in with our cursed charities, and spoil all she aims at; a man trusts to this charity and that, instead of to his own prudence, and he is never sure that the consequences of his neglect will visit him; and, where great self-denial is required, the *chance* of being able to do without is always the alternative accepted. In provident dispensaries a man trusts to his own weekly savings and to no uncertain charity, and the effect upon his character is invaluable. Sir, I have witnessed all this; it is no theory; and I trust, therefore, you will excuse the length to which my letter has extended, for it is very painful to see a Journal, like the *Lancet*, attempting to run down, in such off-hand, declamatory, and flippant style, the most useful of all charitable institutions—the provident dispensaries. If such institutions have not succeeded where they have been attempted, it has been either from bad management, or more frequently because really benevolent, well-qualified Medical men have not been found to attend to them, but they have fallen into the hands of young practitioners, who have made them the mere stepping-stones to more general practice. Almost everything depends upon the Medical men.

I am, Sir, yours faithfully,

CHARLES BRAY.

Coventry, April 29, 1850.

SANITARIUM FOR GENTLEWOMEN.

[To the Editor of the Medical Times.]

SIR,—In your remarks last week, on the establishment for gentlewomen during illness, you are pleased to abuse Mr. Hawksley; but the proper object for your abuse is Dr. Bence Jones, who drew up the medical titles and rules.

1st. Regarding the former. The title—Esquire—was omitted with no design of insulting Mr. Hawksley, or any other General Practitioner. The distinction is solely one of custom, and not a matter of right; as you well know very few of those who receive it are entitled to this appellation.

What then is the custom. Other far older and not less honoured General Practitioners are printed in lists of officers as plain Mr., and until the Editor of the *Medical Times* fell on Mr. Hawksley, to show his zeal for the General Practitioner, they did not think they were wanting in right feeling, or proper *esprit de corps*, by allowing themselves to be so described.

2nd. As to your assertion, that because Mr. Hawksley is so called, therefore these rules were imposed. A paid officer was appointed to this Institution in order not to trouble the honorary officers to attend the Institution more than once each day.

It appeared to me, that as long as a perfect understanding existed between the honorary and paid officers our Institution medically would prosper, and proper feeling alone would make all rules unnecessary; but I also considered that the opposite state might unfortunately occur. It had occurred elsewhere, and to meet this I formed those rules. I trust the occasion for enforcing them may never occur.

I hope your good feeling may make you regret that you have unjustly injured one General Practitioner for the purpose of showing your zeal for the many.

Your obedient servant,

H. BENCE JONES.

30, Grosvenor-street, April 29, 1850.

[This letter deserves comment.

1st. Dr. Bence Jones states, that it is the "custom" to withhold the title of Esquire from General Practitioners in the printed lists of officers of public Institutions. This statement is certainly incorrect; and if the custom were as stated, it would be one "more honoured in the breach than in the observance." General Practitioners, as members of a learned Profession, are, by courtesy, entitled to the designation Esquire. We are not aware that the iniquitous Charter of the College of Surgeons among its other offences conferred on a Fellow the especial privilege to enjoy this title; and, by refusing it to the mere Member, stripped him of his claim to the position of a *gentleman*. Our complaint referred to the distinction that had been made between a Fellow and a Member of the same College, and not to the abstract use of either title. We think it shows a great want of proper "*esprit de corps*" to dishonour the Profession, by attempting publicly to degrade, and significantly to place below the social level of gentlemen, the larger portion of its Members.

2nd. We never made such a silly assertion, "that *because* Mr. Hawksley is so-called, *therefore* these rules were imposed." We did not assume that the one was a logical consequence of the other; but merely showed that one fact illustrated the other. We are quite willing, however, that Dr. Bence Jones shall carry out his own principles to their full extent. *We* are not accustomed to bungle in our work. We do not see, moreover, the logical necessity of intimating, that Mr. Hawksley is "*a paid* officer." It surely cannot be intended to insinuate, that *because* he is a paid officer *therefore* he should be deprived of the title of Esquire!

We are quite of Dr. Bence Jones's opinion, that "proper feeling *alone* would make all rules unnecessary," and regret that he should have been so unwise as to devise rules with regard to duties which can be satisfactorily carried out only by the maintenance of that "proper feeling" and "perfect understanding" spoken of. When Dr. Bence Jones states, that "he trusts the occasion for *enforcing* them may never occur," we are bound to conclude, that he intended that these rules should establish the inferiority of the General Practitioner, who would be expected meekly to do duty under "my masters," or suffer the penal consequences of his contumacy.

In our last Number appeared a letter signed "M.D.," to which, by the way, should have been appended a notice, which by mistake was attached to the communication following it. In this letter was a sentence which we earnestly recommend to Dr. Bence Jones's serious consideration. We are assured he will entertain a high opinion of the judgment of

the writer, and freely admit the truth conveyed in the sentence. It runs thus:—"And let not the name (General Practitioner) be despised, for this is, in fact, if not in name, the position which each individual physician will be compelled, in the course of a few years, to take, unless he wishes to die of something very closely resembling *slow starvation*."—ED. *Medical Times.*]

NAVAL ASSISTANT-SURGEONS.

[To the Editor of the Medical Times.]

SIR,—Will you allow me a small space in your Journal to meet some of Captain Berkley's objections for withholding from us "that proper position which he, for one, would yield to no man in wishing to see us occupy."

Good Captain Berkley—how kind! But to his absurd arguments, some of which are really too ridiculous to bear comment.

Objection 1.—"It is not for our advantage to mess in the ward-room; or, at all events, on our *first* entering the service." The gallant Captain *knew* to the contrary.

Objection 2.—"The expense of a ward-room mess." This he could never complain of, our pay being superior to that of some ward-room officers (the subalterns of Royal Marines, and naval instructors.) How often does it not happen, that the Midshipmen's mess is very much more expensive than that of the ward-room?

Objection 3.—"We gained by associating with youngsters"!! 'Tis true that midshipmen, generally speaking, are gentlemanly young fellows; but that we gain by associating with them, I think few will believe who know what a midshipman's berth is.

Objection 4.—"Difficulty of transferring us from line-of-battle ships to brigs, where there are no ward-room!!"

Objection 5.—"Cabins are given to engineers; but that was *only* in steam-vessels. The junior engineers messed in their cabins." They do not mess in their cabins,—though what bearing this can have on the question it is difficult to imagine.

Objection 6.—"There was no such thing as a ward-room in steamers"! No; but there is a ward-room officers' mess, termed a gun-room. "A rose by any other name would smell as sweet."

He next said, "it was contrary to our interest, and he believed (?) generally speaking, to our desire also"!!!

Should we happily succeed, I think, Mr. Editor, we shall be not a little indebted to the gallant Captain's ingenious arguments for withholding from us "that proper position he always wished to see us occupy."

I remain, Sir, your very obedient Servant,

ONE OF THE AGGRIEVED.

Portsmouth, April 11, 1850.

TWO CASES OF FRACTURE OF NECK OF THE SCAPULA.

[To the Editor of the Medical Times.]

SIR,—In your review on Callaway's Work on Dislocations, you state Mr. South is of opinion fracture of the neck of the scapula never occurs. Two such cases have come within my knowledge; one recently mentioned to me by Mr. Wilson, of Alnwick, and a case of my own a few years ago. In this case the neck of the scapula was carried down with the head of the bone into the axilla. At my first look I thought it a dislocation of the humerus; but the great moveability of the arm, the ease with which it was replaced, and its instant fall when support was removed, sufficiently pointed out the character of the accident: it united rapidly and satisfactorily.

In noticing injuries of tendons you state, in a practical point of view they are of less interest. In this I do not agree with you. They are the opprobrium of surgery, and drive many patients into the hands of "bone-setters," who occasionally, by severe twisting and twining, *accidentally* succeed in getting the tendon into its place, and then it figures as "a clever reduction of a *dislocation* which the Doctor could not manage."

Your obedient Servant,

THOMAS LEITHEAD.

Warkworth, April 29, 1850.

DESCRIPTION OF AN APPARATUS FOR REDUCING FRACTURES OF THE LOWER EXTREMITY.

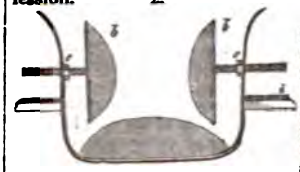
[To the Editor of the Medical Times.]

SIR,—During the past six or seven years I have paid particular attention to the various fractures that have come under my notice; and having seen, in several instances, that they have only been partially reduced, from want of sufficient aid, I have been led to the invention of an instrument of the following nature for fractures of the *lower extremity*.

Gradual extension is produced by a screw; no joint is involved in extension, as the extending and counter-extending powers are placed over the extremities of a bone (*e. g.*, above the ankle-joint and below the knee-joint), and by this means, should there be swelling, fomentations can be applied; or if wounds, dressings, without disturbing the extended state of the limb; if spasms occur, the fragments cannot be displaced. A swinging motion is also enjoyed by the patient, from the instrument being suspended by four straps from an iron cradle.

The apparatus may be said to be complicated, when compared with splints now in use; but as it is intended for such fractures that cannot be properly managed with the more simple contrivances, I have now ventured to introduce it to the notice of the Profession.

2.



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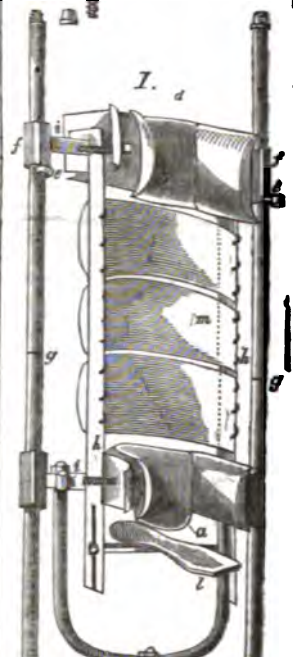

The accompanying drawing was taken by Dr. Westmacott (King's College), but he suggested, in order to show the mechanism of the caps, a separate sketch of a section of one of them, on a larger scale. (See Fig. 2.) The following is the mode of its application in fractures of the leg: a bandage must be applied to the foot, beginning at the toes, and terminating above the ankles; another, loosely, extending a few inches above and below the knee-joint. The apparatus is then to be laid on the bed, and the foot placed in the cap *a*, taking care that the heel rests on a prolongation for the purpose, and the ankles are in a line with the pressure-pads *bb*; the nuts *cc* should then be turned, so as to bring the pads in close contact with the ankles; the cap *d* must be placed a little below the knee-joint, and the pads fixed in the same manner as before, and the check-pins *ee* placed in the holes below the slides *ff*. The cradle should now be placed on the bed, and the limb and apparatus raised a few inches and suspended, two straps on either side (one above and the other below) being passed from the rods *gg* to the top of the cradle. The side pieces *hh* run from the upper arms *ii* to the lower ones *kk*, and the lower edges of these pieces are to be rested on them. Extension should now be made by an assistant turning the nut *k*, whilst the surgeon places the fragments in proper position. The foot-piece, *l*, must then be fixed by its nut with the side-piece against the sole of the foot. On the *upper* edge of one side-piece, are to be hooked two or three pieces of webbing, *m*; a many-tailed bandage is applied to the leg, (between the points of extension and counter-extension,) and a pad, made with tow or bran, covers the back and sides of the limb; the pieces of webbing pass [illegible] the whole, and are hooked on the correspo[illegible] side-piece. Should, however, any wound exist [illegible] back or side of the leg, the pad should be cut [illegible] a little above and below such injury, so as to [illegible] its temporary removal, (by unhooking one [illegible] pieces of webbing,) that dressings may be [illegible] applied.

In fractures of the *femur*, the cap, *d*, is placed [illegible] the knee-joint, and fixed in the manner al[illegible] described; the check-pins, *ee*, are not to be us[illegible] bandage is passed twice or thrice from the arm [illegible] upper cap to that of the lower on either side; [illegible] pressure-pads of the lower cap are not to be us[illegible] such, but are merely to be brought in contact [illegible] the ankles, so as to keep the foot in position. [illegible] *thigh*-piece (as represented in Fig. 3) consist[illegible] pad adapted to the groin, and is fixed to the sc[illegible] of a screw, the lower end of which runs into the [illegible] *g*, and is regulated by a nut against which the [illegible] is forced. Extra pads may be placed in the gr[illegible] the stationary one is not sufficient. In fractur[illegible] this bone, the cradle is not to be used, but pi[illegible] are to be placed under both sides of the appa[illegible] Extension is caused as before, by turning the [illegible]

I cannot refrain from expressing my sense of [illegible] gation to Mr. Fergusson and Mr. Partridge for [illegible] notice they have taken of the apparatus, the form [illegible] having been kind enough to test it in the wards [illegible] King's College Hospital.

Much credit is due to the maker, Mr. Scott, Gr[illegible] ville-street, Hatton-garden.

HENRY GREENWAY, Medical Student.

King's College, London, March 27, 1850.

LONDON UNIVERSITY—PRIVILEGES OF GRADUATES.

[To the Editor of the Medical Times.]

SIR,—I yesterday attended the London University meeting at King's College, held for the purpose of publicly conferring the degrees and awarding the honours to the successful graduates of the last year; and was, in common with many of my fellow graduates, much surprised at the fact, that the chief part of the ceremony, namely, the introduction of the alumni to the Chancellor was performed, in most instances, by persons who are not graduates of, or in any way connected with, the University of London. In many cases, I am confident, that the individuals who took it upon themselves to perform that duty had not even been officially introduced to the Chancellor, and were, therefore, breaking both the law of the University and the decorous rules of society. May I be permitted to inquire how this has happened, not only that the error may be, if possible, corrected on a future occasion, but that the rights and privileges of the Graduates, and the honour of the University,—for both of which we have been so long contending,—may be effectually maintained. Moreover, to witness the introduction of the alumni by gentlemen who are not connected with the University, is, to a very considerable extent, a disgrace to the College from which they have emanated, inasmuch as it implies, either that there are no graduates connected with it, or else that the members have not attained sufficient eminence in the world to be considered worthy of that honour. Taking this view of the matter, I would ask the gentlemen connected with Guy's and the London, where were their Gulls and their Johnsons, their Parkers and their Lethebys, that they did not take upon themselves the very proper duty of presenting the alumni of their respective Colleges. I trust that the Committee of Graduates, to which we are most deeply indebted for our present position, will take upon themselves the task of considering this matter, and of expressing their opinion thereon to the Senate of the University.

Believe me to be yours obediently,

A GRADUATE IN ARTS.

MEDICAL REFORM—MR. BOTTOMLEY AND THE "PROVINCIAL MEDICAL AND SURGICAL JOURNAL."

[To the Editor of the Medical Times.]

SIR,—As the best interests of 10,000 General Practitioners are at this moment so deeply concerned, it is very important that there should be no misrepresentation on the subject in any quarter. The Editors of the *Provincial Medical and Surgical Journal* have told their readers that the late meeting of the Institute was "very scantily attended," and they hint, that it remains to be seen whether the Memorial to Sir George Grey for a new College, from "so limited

an assemblage," or the sentiments so generally held by the members of the Provincial Association, coupled with Mr. Bottomley's ideal 3000, will prevail with her Majesty's Government. As the remarks of the Editors are altogether founded on fallacies, I have addressed some observations to them which you will much oblige me by inserting in your next Number, that General Practitioners may judge how far meetings of twenty or thirty provincial gentlemen, chiefly consulting and hospital practitioners ought to affect the demand of the great majority of the Profession for an independent College.

The Provincial Association is a mixed body of Physicians and Surgeons and of General Practitioners, but the government is chiefly vested in the two former classes, which naturally accounts for the almost proverbial lukewarmness which prevails in the Association to that reform which affects the position of the General Practitioners. Let the leaders of that Association—the M.D.s and Hospital Surgeons of the provinces—make what terms they please for themselves with the Colleges of Physicians and Surgeons; let them purchase from these bodies such titles as they may wish to possess, but let them not intermeddle with nor vote against the rights and independence of those in General Practice.

The Colleges are now alarmed, and will offer more concessions than they would have done at any former period, and they will grant these the more readily to obtain the control of the education and examination of the General Practitioners; but, after the repudiation of the acts of their own Delegates by one of these bodies, what dependence can again be placed in corporate faith! *The College of Surgeons, even at the present moment, when they consider their existence in jeopardy should a new College be formed, will not allow a General Practitioner to be eligible to their Council, nor even grant the right to their members to vote for the Council; in fact, after all, nothing worth having will be granted!*

Let then the General Practitioners, now that the game is in their own hands, reject all proposals whatever, but those which will place them in an independent College of their own, for if they lose the present opportunity they may never obtain such another.

I am, Sir, your obedient, faithful servant,
GEORGE WEBSTER.

Dulwich, April 30, 1859.

[To the Editors of the Provincial Medical and Surgical Journal.]

GENTLEMEN,—Permit me, as a member of the Institute, to make some observations on that part of your last leading article which refers to the late meeting in Hanover-square; for though I and your readers must now be well aware of the strong leaning of the Worcester Council (and, therefore, of the *Journal*) towards the London Colleges, notwithstanding their high crimes and misdemeanours against the Profession, and especially against those in general practice, still I do not believe that the Editors would, from any motive whatever, wish to pervert the truth. You must, however, have written from very erroneous information, when you state that the meeting of the Institute was "very scantily attended;" and when you allude to its memorial to Sir George Grey for an independent College of Medicine and Surgery, as 'from so limited an assemblage as that occupying the room in Hanover-square."

I do not know what you gentlemen in provincial towns would consider a large meeting, but to judge from these expressions, I suppose nothing less than 2000 or 3000 would satisfy you. "The room in Hanover-square" happens to be one of the largest in London for public purposes, and at a rough guess will, I suppose, hold 1200 to 1500 people; let us take the smaller number, and as the room, including the platform, was more than half full, we shall be within compass if we say there were about 600 present; and when it is remembered that there were more than twenty gentlemen delegated from various Societies and Associations in London and the country, we may have some idea of the numbers actually represented beyond the 4000 members of the National Association, many of whom were present.

One circumstance especially worthy of remark is, that this was a meeting of gentlemen in general practice, there being, I believe, only four Consulting Practitioners present, including our respected friend Dr. Hodgkin, Chairman of the Poor-law Convention; but these gentlemen took no part in the proceedings. This is very different from the conduct pursued at the country meetings, where Consulting Practitioners seem to have attended in comparatively considerable numbers, and taken the lead in proceedings which so deeply affect General Practitioners.

Let us now compare the "limited meeting" of the Institute with those of the branch meetings of the Provincial Association, upon which you lay so much stress in deciding against a new independent College. We might be led, from your triumphant tone, to suppose that they were not "limited assemblages," nor "scantily attended;" but what is the fact? Why, at the only two meetings where I have been able to ascertain the numbers, viz., Bath and Brighton (two of the largest branches), there were actually but thirty-two gentlemen present at the former place, seventeen of whom were Consulting Practitioners, and only twenty at the latter! If the Secretaries of the other branches will furnish the numbers at their meetings, we shall, I suspect, hear of very "limited assemblages," "very scantily attended," and I much question if the aggregate numbers of those who met at all the branches would amount to one-third of those who assembled at the one meeting of the Institute. I presume, also, that the General Meeting held last year at Worcester was (from the unusual interest attaching to it) the most numerous that ever took place; but even that, according to the *Journal*, consisted only of 133 persons. I hope, therefore, that in future you will not consider 600 gentlemen so very "limited an assemblage," seeing they form a fourth part of the whole Profession in the Metropolis. But then you fire off my worthy friend Mr. Bottomley against the meeting, as a 3000 pound shot from an enemy's battery! Now, I cannot allow all this weight to my excellent old colleague, though he doubtless possesses considerable specific gravity; far less shall I ever look upon him as an enemy to the cause I advocate. No! I know him and all his sterling good qualities much better than you seem to have done upon several occasions lately. It is true that Mr. Bottomley did state, in an unguarded moment of excitement, that he believed he represented 3000 gentlemen, but he was reminded on the spot that he had suddenly raised that number from 2000, his former estimate. Indeed, that estimate was taken very roughly from the supposed numbers who, three years ago, signed a Petition to the College of Surgeons; but that was long before the late evil doings of the said College, and when a hope still lingered in men's minds that it would do justice to its members. The Petition emanated from a Society styled the "Associated Surgeons," of which Mr. Bottomley was at that time Chairman, and which consisted, I believe, of several hundred members. But that Society has long ceased to exist, leaving neither Council, Committee, nor wreck behind, except it be Mr. Bottomley himself; for neither at the Conference, nor at the Deputation to the College, nor at the Institute, had he a single member to support him out of the supposed 2000! Indeed, he himself must consider that its very object is gone also, for his amendment at the meeting was not to open the College to its members, but to form a Faculty of Medicine, an Incorporation for the whole Profession.

You state most truly when you say that his motion "was *not* numerously supported, and, consequently, was lost," for only five hands were held up in its favour! But whether Mr. Bottomley represent 2000, or 50, or 5 persons only, as at the Institute, I claim him as the supporter of a new Institution, by whatever name it may be called.

It appears to me, that you and others have a morbid dread of a third incorporation; but you quite forget that a third body *already exists*, and which has exercised its powers greatly to the benefit of the public, and the welfare of our Profession. The Society of Apothecaries, highly to their credit, are willing to surrender their powers—not to the Colleges of Physicians and Surgeons, but to a new College, based upon the representative principle, and having increased powers and privileges; therefore *no additional body* would be necessary. But the Society would oppose to the uttermost, and I believe successfully, every effort to deprive them of their present important position, without adequate and increased advantages to their own class; and I am convinced the London General Practitioners would rally round them to a man.

In fact, the evils complained of are much more felt in London than in the country, and the amount of reform which evidently would satisfy the Worcester Council and some of the leading men of the Provincial Association, chiefly consulting Practitioners, will not satisfy the gentlemen in general practice in the metropolis; therefore, I see no prospect of peace to the Profession, without an independent College of Medicine and Surgery. I have no doubt this will be fully explained at the approaching Deputation of the Institute and the National and other Associations to Sir George Grey; and also the very "scanty attendance" at the "limited assemblages" in the country, where a few Consulting Practitioners have been voting away the rights, the education, and control of the General Practitioners, to the College of Physicians and Surgeons.

I am, gentlemen,
Your faithful, obedient servant,
GEO. WEBSTER.

Dulwich, 27th April, 1850.

HEALTH OF LONDON DURING THE WEEK ENDING APRIL 27.

The return for week ending last Saturday announces a continued decrease in the mortality of London. Since the third week of March, when it rose, the weekly mortality has constantly fallen, as is shown by the following numbers: the deaths were 1,167, 1,124, 893, 866, and in last week only 803. This last number is less than in any corresponding week during the ten years 1840-9, except that of 1842; and the average of the ten weeks being 909, or, corrected for increase of population, 992, there now appears a decrease on it, amounting to 189. All the important classes of disease exhibit now a decrease on the average in the deaths assigned to them. From small-pox there were 7 deaths, or about half the average; from measles 17, from scarlatina 21, from hooping-cough 35, and from typhus 25, which diseases are all less fatal than usual; croup was fatal to 5 persons, influenza to 4, purpura to 2, diarrhœa to 11, and erysipelas to 9, all near the ordinary amount. On the 19th of April, at 11, Wycombe-place, Kent-road, a carman, aged 40 years, died of "disease of the kidneys; English cholera: the latter complaint of 9 hours' duration." Again, amongst diseases which affect the respiratory organs, bronchitis carried off 46 persons, rather more than the average of ten corresponding weeks, but less than that of the last three (in the years 1847-9); pneumonia, or inflammation of the lungs, about the same number, considerably less than the average. Only 6 persons died of asthma; and 110 of consumption, the corrected average being 158. A child died of laryngismus stridulus, two children and a man of laryngitis. The deaths of 20 persons, of whom 18 were women, were the result of cancer, and all occurred between 35 years of age and 80. Seven boys and 8 girls died after premature birth. Three children were suffocated accidentally in bed.

The deaths in the several hospitals of London occurred as follow:—

GENERAL.		Sussex & Brandenburgh-house (Fulham) ...	0
St. George	7	Northumberland-house	0
Westminster	3	Whitmore House ...	0
Grey Coat Hospital ...	0	Pembroke House ...	0
Charing-cross	1	St. Luke	0
Middlesex...	2	Miles'	1
University College ...	13	Warburton's	0
Royal Free Hospital ...	0	Lunatic Asylum, Bow ...	0
King's College	2	Bethlem	0
St. Luke, City-road ...	0	Lunatic Asylum, Brixton	0
St. Bartholomew... ...	5	Retreat, Clapham ...	0
London	1	York House, Battersea ...	0
Guy's	2	New County, Wandsworth	1
St. Thomas	3	Peckham House ...	3
Bethlem, London-road...	0	Camberwell House ...	0
FOR CONVICTS.		LYING-IN.	
Hospital Ship, Unité ...	0	Queen Charlotte's ...	1
Penitentiary Hospital, Millbank	0	British	1
MILITARY AND NAVAL		City of London	2
Royal Hospital, Chelsea (South)	1	Hospital, York road, Waterloo 2nd part ...	0
Royal Hospital, Greenwich (East)	7	FOR PARTICULAR CLASSES.	
Royal Military Asylum	0	Female Servant Invalid Asy., Stoke Newington	0
Coldstream Guards Hos.	2	German Hospital... ...	1
Grenadier Guards' Hospital	0	French Hospital	0
Scots Fusilier Guards ...	1	Portuguese Jews' Hospital	0
Royal Ordnance	0	German Jews' Hospital	0
Dreadnought Ship ...	0	FOR SPECIAL DISEASES.	
LUNATIC.		Small Pox...	0
Kensington House ...	0	Fever Hospital	2
Munster-house (Fulham)	0	Lock	0
Normand-house(Fulham)	0	Consumption, Brompton	2
Otto-house (Fulham) ...	0	Opthalmic, Charing Cross	0
Blacklands-house ...	0		

TOTAL, 59.

BIRTHS AND DEATHS.

	Births.	Deaths.	Births over Deaths.
Males	729	391	338
Females	770.	412	358
Total.....	1499	803	696

MORTALITY TABLE.

Deaths in the Week ending Saturday, April 27, 1850.

(Metropolis.)

Causes of Death.	Total.	Average of Ten Weeks.
All Causes	803	908
Specified Causes	796	901
Zymotic (or Epidemic, Endemic, and Contagious) Diseases	150	167
Sporadic Diseases:		
Dropsy, Cancer and other Diseases of uncertain or variable seat	39	52
Tubercular Diseases	147	197
Diseases of the Brain, Spinal Marrow, Nerves, and Senses	100	115
Diseases of the Heart and Blood-vessels	31	30
Diseases of the Lungs, and of the other Organs of Respiration	112	135
Diseases of the Stomach, Liver, and other Organs of Digestion	55	59
Diseases of the Kidneys, &c.	13	9
Childbirth, Diseases of the Uterus, &c.	14	10
Rheumatism, Diseases of the Bones, Joints &c.	12	6
Diseases of the Skin, Cellular Tissue, &c.	2	1
Malformations	4	1
Premature Birth and Debility	22	17
Atrophy	16	13
Age	28	56
Sudden	23	12
Violence, Privation, Cold, and Intemperance	28	21
Causes not Specified	7	7

The following is the number of Deaths occurring from some of the more important special causes:—

Apoplexy	22	Heart	26	Phthisis	110
Bronchitis ...	46	Hooping-cough	35	Pneumonia ...	49
Cholera.....	1	Hydrocephalus	19	Scarlatina	21
Childbirth	9	Influenza	4	Small-pox	7
Convulsions...	23	Liver	12	Stomach	6
Diarrhœa	11	Lungs	3	Teething	11
Dropsy	14	Measles	17	Typhus	25
Erysipelas ...	9	Paralysis	21	Uterus	3

METEOROLOGY OF THE WEEK.

Day.	Mean of Barometer.	Mean Thermometer. Dry.	Ditto. Dew Point.	Difference between the Mean Temperature of the day and the same day on an average of 7 years.	General Direction of Wind. A.M.	General Direction of Wind. P.M.	Amount of Horizontal Movement of the Air.	Rain in Inches.	Electricity.*
									Nothing was shown at any examination.
Sunday	29·368	50·9	44·6	+ 3·0	S. & N.	N.	Miles. 45	0·01	Nothing was shown throughout the day.
Monday	29·799	46·1	31·6	— 2·3	N.	N.	65	0·01	Positive, and tension weak during the afternoon.
Tuesday.....	29·831	44·8	38·4	— 3·9	N.	N.	115	0·00	Positive, and tension generally strong throughout the day.
Wednesday.	29·971	44·2	33·6	— 5·1	N.W.	N.E. & E.	40	0·00	Nothing was shown throughout the day.
Thursday ...	29·867	47·4	37·7	— 2·2	S.E.	S.E.	105	0·00	Nothing was shown throughout the day.
Friday	29·976	49·0	41·3	— 1·0	N.	N.E.	130	0·00	Nothing was shown throughout the day.
Saturday ...	30 027	45·0	33·3	— 5·4	N.E.	N.E.	155	0 00	Nothing was shown throughout the day.
Means ...	29·863	46·5	37·6	— 2·4	N.		sum 655	sum 0·05	

* In this Column, A. stands for Active; N. for Negative; and P. for Positive.

MEDICAL NEWS.

Royal College of Surgeons.—The following gentlemen having undergone the necessary examinations for the Diploma, were admitted Members of the College at the meeting of the Court of Examiners, on the 26th instant:—Messrs. Edward Burman Adams, Rumsey, Hants; George Hornley, Pocklington, Yorkshire; Frederick Goodchild, St. John's Wood, Regent's Park; George Garnham, Martham, Norfolk; Thomas Young Thompson, Sherburn, Durham; William Smallpage, Knottingley, Yorkshire; William Thompson, Drigg, Cumberland; Henry Powell Bannister, Coleshill-street, Pimlico; Henry George Allanson, Scarborough, Yorkshire; William Darrach Pennington Swain, Regent's Park; and Henry Greggs Farish, Nova Scotia.

Royal College of Surgeons.—The President and Council have just awarded the Jacksonian prize, founded by the late Mr. Samuel Jackson, a member of the Council, to Mr. Henry Lee, of Dover-street, Piccadilly, for his Dissertation on the Causes, Consequences, and Treatment of Purulent Deposits; and the second prize, of equal value, has been adjudged to Mr. Peter Hinckes Bird, of Birmingham, for his Essay on the Nature and Treatment of Erysipelas. The former gentleman is a fellow (by examination), and the latter a member, of the College.

The College Lectures.—Professor Owen will deliver his last lecture on Generation this day (Saturday,) and, on Tuesday next, Mr. James Paget, the Professor of Anatomy and Surgery to the College, will commence his course of lectures on Inflammation, and continue the same on Tuesdays, Thursdays, and Saturdays, as usual.

Apothecaries' Hall.—Names of gentlemen who passed their examination in the science and practice of Medicine, and received certificates to practise, on Thursday, the 25th April, 1850:—Henry Joseph Stormont, Wallingford, Berks; Roger Lewis, Narbeth, Pembrokeshire; James Bishopp; John Brierly, Staleybridge; Kelburne King; Thomas Crocker; Walter Acton, Leicester; Thomas Arthur Brandt, Manchester; George Salter, Malmesbury, Wilts.

Guy's Hospital.—The prize founded by the late Sir Astley Cooper, Bart., and of the value of 300*l.*, has just been adjudged by the physicians and surgeons of Guy's Hospital to Mr. Thomas Wharton Jones, F.R.S., for his Dissertation on Inflammation.

University of London.—Mr. Hodgson, late of Birmingham, has just been elected an Examiner in Surgery at this Institution, in the vacancy occasioned by the resignation of Mr. Cæsar Hawkins, elected an Examiner to the Royal College of Surgeons.

University of London.—The first public conference of degrees by this University took place in the presence of the Chancellor and Senate. It was stated that 25 gentlemen had passed the first examination for the degree of Bachelor of Medicine, of whom one had obtained an exhibition in anatomy and physiology, another in chemistry, and a third in materia medica and pharmaceutical chemistry; several others had distinguished themselves, and obtained gold medals. Thirteen had passed the examination for the degree of Bachelor of Medicine, one of whom had obtained a scholarship, and eight had obtained the degree of M.D. The Graduates were then presented by the principals of their Colleges, and admitted to their degrees:—as M.D., T. S. Beck, Soorjoo Coomar Chuckerbutty, J. O Evans, H. F. A. Goodridge, and R. D. Harling, of University College; T. Hawksley and F. J. Hensley, of King's College; and S. Ramskill, of Guy's Hospital. As M.B.: W. H. Colborne, J. Morris, S. F. Hatham, and E. Whitaker, of University College; T. R. Armitage, and S. J. A. Salter, of King's College; W. Ayre, of London Hospital; E. E. Barron, and S. W. Devenish, of Guy's Hospital; R. T. H. Bartley, of Bristol Medical School; C. Black, of Edinburgh School of Medicine; and J. Drew, of the Manchester School of Medicine. The following scholars, exhibitioners, medalists, and prizemen were then presented to the Chancellor:—C. Black, M.B., Edinburgh School, scholarship and medal in Physiology and Comparative Anatomy; J. Morris, M.B., University, medal in Physiology and Comparative Anatomy; J. Drew, M.B, Manchester School, medal in Surgery: J. Morris, M.B., University, medal in Surgery; S. F. Hatham, M.B., University, medal in Medicine; C. Black, M.B., Edinburgh School, medal in Medicine; C. Pardey, King's, exhibition and medal in Anatomy and Physiology; H. Thompson, University, medal in Anatomy and Physiology; C. Pardey, King's, medal in Chemistry; W. Odling, Guy's, medal in Chemistry; C. Pardey, King's, medal in Botany; F. J. Money, St. Thomas's, prize in Chemistry: E. Fry, University, prize in Zoology; J. L. Lawrence, University, prize in Botany; F. W. Headlam, B.A., King's, prize in Chemistry and in Animal Physiology.

The New Irish University.—The Belfast papers of yesterday state, "on the highest authority," that the University arrangements, embracing the different faculties of the three Colleges, are now on the eve of being completed, and will in a very short time be publicly announced.

The Provincial Medical and Surgical Association will hold their Eighteenth Anniversary Meeting at Hull on the 7th and 8th of August next, under the presidency of Dr. F.R. Horner, physician to the General Infirmary.

Asylum for Idiots.—The Annual Meeting of the Governors was held last week, when the Secretary read the Report, which stated, that their success had exceeded their most sanguine expectations. Mr. Peto, M.P., had granted them his mansion in Essex on such terms as made it almost a gift. There were already 96 patients in the Asylum. Mr. Peto had also given 200*l.* a year towards the funds, and lent 1,000*l.* without interest. The late Sir C. Forbes had left them a legacy of 500*l.* free of duty, Her Majesty has given 250 guineas to constitute the Prince of Wales a Life-governor, and 270*l.* were subscribed at the festival. The total income from all sources was 470*l.*; total expenditure, 430*l.*; leaving a balance of 40*l.* A girls' and boys' school had been established for the instruction of the idiots, and a gymnasium and baths erected for their amusement. 15 patients were then elected from a list of 170 candidates, of whom no less than 51 were orphans, and all in the most distressed circumstances.

Yellow Fever in Pernambuco.—By recent accounts from the Brazils it appears that yellow fever still rages on various parts of the coast with fearful destruction, attacking all classes, even the natives and negroes. At Pernambuco alone, from the time of its outbreak to the first of March, it is supposed upwards of 2000 persons have perished by it. Of these eleven were British residents, and thirty British seamen belonging to vessels in the roads. The crews of foreign vessels have suffered in nearly the same proportions. Upwards of seventy of these have been received into a temporary hospital on the island of Nagueira, of whom forty died. The greatest consternation prevailed amongst all classes throughout the province, as the pestilence seemed to be acquiring daily a more virulent character. Of those recently attacked, not more than half recover. Intelligence has just been received of the death of the English Vice-Consul, Mr. Goring, from yellow fever. Vessels proceeding to India, or to the Australian Colonies, would, therefore, do well to avoid touching at Bahia, Rio, or Penambuco for the present. A report prevails that the disease was introduced into Bahia by a large slaver from the coast of Africa, and into Pernambuco and Rio by sea.

TO CORRESPONDENTS.

"A Subscriber."—We beg to refer our Correspondent to the Secretary of the Society, Dr. W. Smilles, for a reply to his queries.

"Mr. Braid" will receive a proof of his "Observations on Trance, or Human Hybernation."

"St. Mary's Hospital."—Scrutator.—We have examined into the qualifications of Dr. Lankester, and find that he was admitted an Extra-Licentiate of the London College of Physicians in 1841. He is, therefore, eligible, according to the present laws of St. Mary's Hospital, as a candidate for the office of Physician.

"A Member of 25 Years' Standing," writes:—"In printing the letter 'The Law of England v. the College,' there has been an error of the press, which almost nullifies the whole. Instead of, 'and should a charge of *mal-practice* be brought against him, and a verdict, &c. &c.,' it is printed 'and should a charge of *that practice* be brought, &c. &c.,' which means nothing. Perhaps you can do something to rectify this in your next.

The following advertisement, enclosed with the person's card, and "respectfully presented to the inhabitant of the house," has been very widely circulated. It is quite equal to any appeal of the cheap "slop" system. Certainly not professional or respectable:—"Mr. Mather, Surgeon and Accoucheur, has opened a new dispensary for the poor, at No. 16, Essex-stree, Islington. Such an establishment as the above has long been wanted in this immediate vicinity, and, as it is intended to make it really beneficial to the working-class and the poor, the proprietor hopes that they will all avail themselves of the advantages of this establishment, where attendance will be given every morning from 10 to 12, and after 6 in the evening.—April, 1850."

"Young Botanist."—The liquid in the ascidia of nepenthes destillatoria differs materially from pure water. Professor Voelcker found it to contain from 0·30 to nearly 1 per cent. of solid substances, partly organic partly inorganic.

ORIGINAL LECTURES.

THE LUMLEIAN LECTURES FOR 1850.

DELIVERED AT THE ROYAL COLLEGE OF PHYSICIANS.

By R. B. TODD, M.D., F.R.S.

LECTURE II.

ON THE PATHOLOGY AND TREATMENT OF DELIRIUM AND COMA.

(Continued from page 334.)

Gouty Delirium—Delirium à Potu or Delirium Tremens—Delirium from the habitual use of Opium—Toxic Delirium from the direct Influence of Poisons introduced into the System—Delirium in the Exanthemata—Clinical History of Coma—Epileptic Coma—Abercrombie's simple or Congestive Apoplexy—Cases—Renal Epileptic Coma—Coma after Scarlet Fever, Dropsy, and after acute Dropsy—Slight attacks of Epileptic Coma—Paralytic Strokes—their connexion with diseased Kidney and Bladder—Hysterical Coma—Mesmeric Coma—Case of Spontaneous Mesmeric Coma—Mr. Duan's Case—Concussion of the Brain or Traumatic Coma—Coma from Compression of the Brain—Apoplexy—Can Coma be caused by an increase of Subarachnoid Fluid?—Rheumatic Coma—Gouty Coma—Coma accompanying Typhus and Erysipelas and the Exanthemata—Coma from Anæmia—Coma from Poisons—Recapitulation.

I concluded my last lecture with a description of that remarkable form of delirium which frequently accompanies rheumatic fever, and which is so apt to make its appearance simultaneously with some of those severe internal inflammations, carditis, or pneumonia, or pleurisy, which so often complicate that malady.

It will be necessary for me, by-and-bye, to consider the question, whether this remarkable and most interesting form of delirium is dependent immediately upon the cardiac or pneumonic inflammation, or whether it is merely a part of the general constitutional disturbance. I shall, however, here allude to an important point which favours the latter solution of this question, namely, that in cases of general gout—which resembles rheumatic fever in so many points—a delirium of precisely the same kind as that of rheumatic fever occurs, running the same course, and presenting the same features in its clinical history. A man who has had one or more attacks of gout in his great toe or in his instep, becomes affected with the same disease in all his joints—knees, wrists, fingers, and toes. Towards or at the end of the first week he becomes delirious, without any internal inflammation, and without any cessation of the articular affection, and the delirium runs a course of some days, the patient emerging from it in safety, or dying exhausted and comatose, no trace of any inflammatory process being discoverable within the head, nor in the heart. This is one way in which gout may be said to affect the brain; and, therefore, I would distinguish it as *the gouty delirium*—a feature in the clinical history of cases of general gout, which, like all the other forms of delirium, the Practitioner should be prepared to meet, and to deal with on fixed principles, grounded upon the most reasonable views of its pathology. And I may add, that the delirium may occur in cases where the gout is not general, but limited to one or two joints; but it more frequently occurs when the disease affects several joints.

Delirium Tremens.—I have reserved for the last the reference which I wish to make to a form of delirium with which physicians are better acquainted than any other form, as being of much more frequent occurrence.

This is the delirium of drunkards—the delirium à potu—the delirium tremens.

I suppose there is no man who indulges largely and constantly in his potations, who does not sooner or later fall into this state of delirium.

The progress of such a man may be thus described:—He drinks freely at and after dinner; in the morning, in consequence of the deranged state of his digestive organs, caused by the previous night's debauch, he feels low, languid, and out of sorts, and he is induced to have recourse to the use of stimulants,—wine or spirits, or beer; and so, by degrees, he becomes habituated to taking largely of stimuli, without being aware how much he really takes. He now becomes dyspeptic, flatulent, thirsty; he loses his appetite for food, but craves for stimuli, which supply, in a great measure, the place of ordinary food. Like Boniface, he eats his ale; he drinks his ale, and (when he can) he sleeps upon his ale; but, unhappily, he does not find it so easy to sleep now as he used; he is a long time before he can get to sleep; he is nervous, fidgetty, and restless, and a peculiar tremor is observed to accompany nearly all his voluntary movements, especially those actions which are purely voluntary, and are unaided by reflex actions. Thus, his hands tremble more or less; he cannot write steadily; if you ask him to hold out a heavy book or other object, you will find he cannot do so without more or less of tremor; he speaks tremulously; and, in extreme cases, the patients exhibit a marked degree of nervousness and anxiety on almost all occasions.

The deranged digestion, and the want of complete sleep, soon produce the most destructive influence upon the nutrition of the body, and especially upon that of the brain. Memory and the power of thought begin to fail,—the patient loses his control over his thoughts,—he is apt to wander,—illusions take possession of his mind,—subjective phenomena of vision or hearing are continually occurring. One who was himself a victim to this dreadful vice thus describes his experience of this stage of the progress of the drunkard:—"Hideous faces," he says, "appeared on the walls, and on the ceiling, and on the floors; foul things crept along the bed-clothes, and glaring eyes peered into mine. I was at one time surrounded by millions of monstrous spiders, who crawled slowly over every limb; whilst beaded drops of perspiration would start to my brow, and my limbs would shiver until the bed rattled again. Strange lights would dance before my eyes, and then suddenly the very blackness of darkness would appal me by its dense gloom." (a)

At length the stomach becomes irritable, and rejects everything, or the supplies are cut off, both of solids and liquids, or the patient falls ill of some other disorder, or meets with an accident which subjects him to an antiphlogistic treatment. Now is the time when the delirium fully develops itself; the patient often becomes furious and unmanageable, and sometimes, in the paroxysm of delirium, destroys himself, by jumping out of a window, or in some other way. The delirium, if not violent, is of that kind which is called *busy;* the patient picks the bed-clothes, or catches at imaginary objects floating or flying in the air before and around him.

As this delirium is clearly due to the habitual use of alcoholic stimulants, patients are apt to have several attacks of it, in one of which, sooner or later, they perish. Unless the habit is broken, the delirium will surely recur. Death is caused by exhaustion,—by epileptic paroxysms, which are very apt to come on after a long course of habitual drinking,—or by coma.

If the patient die in a first or second attack, the brain and its membranes will exhibit no indication whatever of disease; but, if he has had several attacks, there will be signs of considerable alteration in the nutrition of the brain and its membranes. These changes are very similar to those which are found after frequent and repeated attacks of epilepsy. They consist of the following:—More or less of thickening and opacity of the arachnoid; enlargement of the Pacchionian glands; shrinking of the convolutions of the brain, and enlargement of the intergyral sulci.

The tendency, in general, of these cases is to recovery; but, after repeated attacks, the danger to life is greatly increased, because of the deranged state of cerebral and general nutrition.

And it is important to remark, that, as in most of the other forms of delirium to which I have referred, a low state of the system,—the loss of blood,—powers enfeebled by a too rigid or too long continued antiphlogistic treatment,—are highly favourable to the production and the persistence of this delirium.

This form of delirium is highly interesting, because it is clearly due to the introduction of alcohol into the blood, which tends to poison the brain, and seriously to impair its nutrition. It may, therefore, be regarded as typical of a class of delirious cases, arising from the introduction of a poison into the system, and which may be designated as cases of *toxic delirium.*

The form of delirium which I have just described, is very closely imitated by the habitual use of opium; the same tremulousness,—the same impairment of the powers of thought and memory,—the horrors,—are all met with, as the result of the long-continued ingestion of this drug.

When alcohol is taken into the system in large quantity at once, it produces, in many persons, a violent state of delirium, which does not cease until the greatest part of the alcohol has been eliminated.

The inhalation of chloroform, of ether, and of other substances of this kind, will produce a state of delirium when the inhalation reaches a certain point, but which speedily passes into coma, when the inhalation is carried beyond that point.

Indian hemp, henbane or hop, belladonna, conium, and, indeed, the whole class of narcotic drugs, are capable of producing, especially in some persons, delirium of this kind.

The poisons of the exanthemata, too, produce delirium; that form of delirium which often develops itself in the premonitory fever of scarlatina, measles, small pox, is of this kind, and will often disappear as soon as the characteristic skin affection becomes fully developed; or, in more severe cases, will continue throughout all the stages of the disease, until the poison has been fully eliminated from the system; or, again, in others, it will show itself only in the more advanced stages of the malady when some check has been given.

I have thus enumerated and rapidly glanced at the principal points in the clinical history of the various forms of delirium which the practitioner may meet with. I have described—

1st. The epileptic delirium and the choreic delirium.

2ndly. The renal epileptic delirium.

3rdly. The hysterical delirium and that of overworked men.

4thly. The puerperal delirium.

5thly. The anæmic delirium.

6thly. The traumatic delirium.

7thly. The delirium of typhus.

8thly. The delirium of erysipelas.

9thly. The rheumatic and the gouty delirium.

Lastly. The toxic delirium, or that which is distinctly due to the direct introduction into the circulation of a poisonous material, of which the delirium of drunkards, or delirium tremens, is typical.

And I have been careful to enumerate them, and to designate them according to some special feature, because it is only by a careful examination of all the states which are favourable to the development of delirium, that we can obtain all the data which will guide us to a safe generalisation respecting the pathology of this remarkable affection.

We shall, however, be in a better position to examine this question when we have collected such details as I can respecting the clinical history of coma.

And as we have seen that delirium occurs in a great variety of circumstances, and under conditions which, to a superficial observation, might appear to be essentially different, so we find coma developed under as great a variety of conditions, and (what is highly deserving our attention) which are in close analogy with those which give rise to delirium.

In speaking of coma it must be understood that I use that term as exhibiting various degrees of the same state; from that profound insensibility in which no other actions take place in the body but those which are purely physical, in which all sense and volition are suspended, to a state of hebetude and lethargy, in which the sensibilities are rendered obtuse and the motor powers correspondingly sluggish.

Now we have, as I said before, coma occurring under circumstances in close analogy with those under which delirium occurs; and I may at once state, as simplifying what I have to relate respecting the clinical history of coma, that we have it occurring in epileptic states, or what may be called *epileptic coma.* 2ndly. We have it in hysteria—*hysterical coma.* 3rdly. We have it under circumstances which have exposed the system to some

(a) Autobiography of J. B. Gough, quoted in Dr. Carpenter's Prize Essay on Alcoholic Liquors.

severe shock, as from great injuries — *traumatic coma*, 4thly, and here the analogy with delirium fails, we have coma arising from *compression* of the brain, as from an injury to the skull with depression of bone, or hæmorrhage within the cranium, from the effusion of blood on or into the substance of the brain, or from fluid in large quantity poured out into the cavities of the brain. 5thly. Coma will occur, and now the analogy returns, in rheumatic fever, in gout, in severe visceral inflammations, either after or independently of delirium. 6thly. We have it after great losses of blood, either after or independently of delirium, and in states of anæmia, without loss of blood; and lastly, we have the *toxic coma*, arising from the direct ingestion of a poison as of alcohol or opium.

Epileptic Coma.—It will be unnecessary for me to dwell at any great length upon the clinical history of the epileptic coma. Like the epileptic delirium, it may occur before or after, or before and after, a convulsive fit, or it may occur without any convulsive fit, and it may be preceded or followed, or both preceded and followed by delirium. A man may fall into the comatose state suddenly, without previous warning, and remain in it a longer or shorter time, and come out of it without having suffered any apparent mischief,

The most perfect example of this kind of coma is afforded by what Esquirol calls the *epileptic vertigo*, the *petit mal*, the epileptic paroxysm without convulsions—a form of epilepsy which is often highly destructive to the mental powers, especially when the attacks succeed each other at short intervals.

There are many instances in which men have had attacks of this kind of coma once in their lives, without any recurrence; and, the attack having occurred shortly after a meal, has been attributed to indigestion, and perhaps not without cause.

It is seldom that such an attack will take place wholly without convulsions, although they may escape the notice of bystanders. At the very commencement of the attack, there will be a short convulsion of the muscles of the larynx, and perhaps also of those of mastication and of the eyeballs; and it is this convulsion which determines the congestion of blood in the bloodvessels of the brain, which is sometimes found after attacks of this kind, and to which some attribute the phenomena both comatose and convulsive. In such attacks the course of events is this—a change takes place in the brain, caused either by mental emotion, or by some physical influence,—an abnormal development of the nervous force is produced—consciousness is instantly destroyed—the patient remains in an unchanged attitude, or he falls—and simultaneously with, or instantly after, the destruction of consciousness, the convulsive affection of the laryngeal muscles, and perhaps also of the muscles of mastication, takes place, and immediately subsides; the coma remaining for a longer or shorter time, and sometimes killing the patient in a very few minutes.

The condition, called by Dr. Abercrombie *congestive apoplexy*, may, as it seems to me, with more propriety, be referred to this state of *epileptic coma*. I shall quote one of the cases related by Dr. Abercrombie, for the purpose of comparing it with two similar cases which occurred in my own experience.

"A gentleman, aged 24, had been observed for some days to be dull and drowsy, and he frequently complained of his head. Not having appeared at his usual time one morning, his friends went into his room and found him lying across his bed, half-dressed, in a state of perfect apoplexy. The attack was evidently recent, and it was supposed that he had been seized while he had been stooping over his basin in washing. His face was rather livid, his breathing stertorous, his pulse slow, and of good strength. All the usual remedies were employed with assiduity, but through the day there was no change in his symptoms. In the course of the night he recovered considerably, so as to know those about him, but, in a short time after, he relapsed into coma, and died early on the following day, little more than twenty-four hours after the attack.

"*Inspection.*—There was a slight turgescence of the vessels on the surface of the brain; no other appearance of disease could be detected after the most careful examination. All the other viscera were in a healthy state."

The first case of this kind to which I shall refer from my own experience is one which excited much interest at the time it happened, in consequence of the great respect in which the individual who was the subject of it was generally held.

He was a tall, stout, well-made man,—had just completed his 55th year. He was well known in the scientific world, and not more admired for his high intellectual qualities than for his kind and amiable disposition. Of all the men I ever knew, there was none of whom it might be more truly said, that he was

Integer vitæ scelerisque purus.

I enjoyed the high privilege of having been on terms of the closest intimacy with him for many years, and was well acquainted with the state of his health and constitution, which I had no reason to believe were otherwise than sound.

He was of an ardent but extremely cheerful temperament; he was anxious and easily excited, but possessed great sweetness of temper. At the time of the fatal occurrence he held the office of Foreign Secretary to the Royal Society; a subject was under discussion at this time about which he was excited rather more than his usual evenness of temper generally permitted, or than the intrinsic importance of the matter in question justified, a circumstance which led me to apprehend that he was out of health, although I could not detect any other satisfactory indications of it. At one of the Thursday meetings of the Council, which was very fully attended, he addressed the members present briefly on the subject of discussion, but in such a manner as led those who heard him to think that he felt very warmly upon it. Shortly after he had resumed his seat, he was heard to make a gurgling noise in his throat, and his eyes were turned convulsively upwards. He was caught just in time to prevent him from falling, and was laid on the floor in a state of coma, foaming at the mouth, and breathing with some degree of stertor. There were several medical men present, and as he did not seem readily to show signs of recovery, it was judged expedient to bleed him. The blood flowed readily, but as the pulse very soon showed signs of failing, the arm was soon tied up. He never rallied from this state of coma, and died in less than a quarter of an hour after the attack.

I was present at the *post-mortem* inspection which took place on the following day. There was not an unsound viscus in the whole body; the brain was essentially healthy, but exhibited at parts, especially where the small branches of the middle cerebral artery penetrate the fissure of Sylvius, a considerable degree of congestion. Some doubts might have existed as to the perfectly healthy state of the kidneys; but it may be certainly affirmed respecting them, that if they were at all in a morbid condition it was a very early and slight degree of chronic nephritis.

This was a case, then, which Abercrombie would have called *simple apoplexy*. It seems to me a more reasonable view to suppose it to have been one of epilepsy or epileptic coma, and although the patient had never previously shown any symptom of such a disease, yet his excitable temperament, and the strong emotions under which he laboured and which he used great efforts to control, were quite sufficient to develope such an attack, more especially if there had been any incipient disease of the kidney.

In a second case, where the attack was equally sudden but the event not so rapid, the distinct existence of renal disease denotes the truly epileptic nature of the attack. A respectable tradesman in the Strand had been some time suffering considerable anxiety in consequence of the depressed state of trade, and had experienced for a few days a feeling of giddiness in the head, to which, however, he paid no attention. On the evening of the 11th March, 1848, as he was walking from one room to another he fell as if shot, not insensible, but paralysed on the right side; he was like one who had experienced a sudden shock,—cold, depressed, with a feeble heart and pulse. He was almost instantly attended by my friend, Mr. Duncan, of Henrietta-street, Covent-garden, who is a most judicious Practitioner. This was at six o'clock p.m. At that time Mr. Duncan found it impossible to do more than take a small quantity of blood by cupping from the back of the neck. At eight o'clock he became completely insensible, with contracted pupils, and breathing heavily. He was now bled from the arm to 4 or 5 oz. without any effect; and he continued in a state of profound coma, perfectly insensible, without any great stertor until nine o'clock the following night, when he died: just twenty-seven hours after the attack.

The symptoms were such as led me to expect a clot of blood in the corpus striatum of the left side; but a most careful examination of the brain disclosed no diseased condition of that organ beyond a little shrinking. There was a great deal of subarachnoid fluid, and one or two drachms of fluid in the ventricles. The kidneys were contracted, and distinctly in the state of the so-called chronic nephritis.

There is a distinct connexion between chronic disease of the kidneys and this form of coma, just as between the same form of renal disease and the epileptic delirium. The coma connected with renal disease will come on under three forms:—1. Suddenly, becoming profound and passing to a fatal termination; 2. Gradually, and also passing into the profound state; and, 3rdly, in paroxysms presenting an exact resemblance to the epileptic, either of coma simply or of coma with convulsion, or of either or both accompanied with delirium. And the state of the urinary secretion varies, always, however, presenting a decided departure from the normal state, being either wholly suppressed or greatly diminished in quantity, or even increased in quantity, with low specific gravity. The more serious head symptoms will occur in those cases where the deficiency of the urine or of its solid contents is most marked. In nearly all cases the urine contains albumen.

The cases of ischuria renalis, as it has been called, long recognised by practitioners, and graphically described by the late Sir Henry Halford, must be referred to this variety of coma.

Coma in Dropsy after Scarlet Fever.—The coma which comes on in dropsy after scarlet fever is of this kind. A child has gone through a mild attack of scarlet fever, dropsy developes itself universally after two or three days, the urine is very deficient in quantity, and, after a day or two, the child falls into profound coma and dies. On examining the brain no morbid change is discernible, excepting that the organ looks pale, in common with the rest of the body; but the kidneys exhibit the characteristic signs of the acute disease which is so common when the scarlet fever poison has been received in large doses or imperfectly eliminated by the skin.

Coma in Acute Dropsy.—So, also, after acute dropsy, coma will come on, and either kill the patient or greatly endanger life, and the same appearances exactly as in the scarlet fever dropsy will present themselves. Or, as is I believe a very frequent occurrence, an acute affection of the kidneys will supervene on a previously existing chronic affection, and kill the patient by coma in a few hours. Many a case of rapid death is, I have no doubt, due to this form of coma, the renal affection having been undetected during life, and perhaps overlooked after death. A man may have had chronic renal disease creeping on insidiously, and so long as a sufficient quantity of water had been eliminated through the kidneys no symptom sufficiently serious to lead him to seek medical aid would occur. But presently he would be exposed to cold, or his digestive organs would become much deranged, the kidneys fail in their action, "the pitcher is broken at the fountain," and fatal coma ensues.

Comatose affections of this kind are sometimes extremely slight, and even momentary; but, however slight they should be carefully investigated, and especially with reference to the powers of excreting the urine. Mild forms of what are called *paralytic strokes* are sudden attacks of epileptic coma, which may or may not be accompanied with paralysis, which, when it does occur, is frequently quite transient, just as the paralysis after epilepsy is. A gentleman, aged fifty-two or fifty-three, was under my care the greatest part of last summer for chronic disease of the kidneys. He appeared to be going on well, when one night I was hastily summoned to him, the messenger stating that he had had a paralytic stroke. I found my

patient sitting up in bed, in a state of great alarm, and he informed me, that just after he had got into bed he was seized with a sudden loss of consciousness, which lasted scarcely a minute, and that he felt a loss of power on the left side of his face, and there still remained a sluggishness of motion on that side which lasted two or three days. Three months afterwards, this gentleman, having continued in his usual health during that period, while staying at the house of a friend in the country, was seized with another similar attack, from which he recovered for the moment, but speedily relapsed into coma, and died in a few hours. I had no opportunity of examining the brain, but the existence of renal disease admitted of no doubt.

I have some reason to think that obstacles to the excretion of the urine at the bladder may occasion comatose affections of a similar kind. Not only "may the pitcher be broken at the fountain, but the wheel may be broken at the cistern." Last autumn I saw a gentleman of 60 years of age, an eminent solicitor in Lincoln's-inn, who, while talking with a client, received a sudden stroke, creating a momentary loss of consciousness, and a sense of numbness on one side of the face and body. I saw him immediately afterwards, and found him greatly alarmed; but, on making him keep the horizontal posture, and take some ammonia, he completely recovered, and went home to his residence a little way from town, where I saw him two days afterwards, along with Dr. Cobb, of the London Hospital. After most careful examination, we could discover no evidence of renal disease, nor any cause for his attack besides over-work in his profession. It appears that afterwards he had a repetition of the attacks, although he had given up work, and gone into the country for change of air; and it was now found out, that he experienced some difficulty in micturition, owing to an enlarged prostate gland. This was relieved by mechanical means, and since then there has been no recurrence of the attacks.

In all these cases of epileptic coma, the appearance of the brain and of its membranes, after death, affords no indication of the previous existence of any active morbid process during life.

If the immediate exciting cause of the comatose state be of recent origin, the brain will exhibit no morbid change; if few or no attacks have occurred before the fatal one, there will be no morbid change; but if there have been several attacks previously, as in ordinary epilepsy, there will be the same changes as we see in that disease—a shrinking of the convolutions of the brain, some opacity of the arachnoid, perhaps some adhesions between its layers, and more or less of fluid in the subarachnoid space, that fluid being the more abundant in proportion as the convolutions of the brain are more shrunk, the shrunk brain, with a large quantity of surrounding subarachnoid fluid constituting the condition which succeeds the so-called serous apoplexy of authors. Most, if not all, of such cases (excepting where the serum has been poured into the ventricles) being probably epileptic coma, either connected with ordinary epilepsy, or with some defective action of the kidney.

Hysterical Coma.—The hysterical coma is of very frequent occurrence, and sometimes resembles the epileptic so nearly, that it is very difficult to distinguish the one from the other. One characteristic of it, however, must be especially borne in mind, that it rarely, if ever, is perfect. Even in the worst of cases, some spark of sensibility remains, which may be lighted up by loud speaking, or shaking, or the dash of cold water, or pinching, and a power of performing voluntary acts, or maintaining certain attitudes, such as walking, sitting, &c. Again, while a patient may fall into this coma suddenly, he may come out of it with equal rapidity, and without any bad effect—a fact which sufficiently shows, that in this state there can be no such change in the condition of the brain as may not right itself almost instantaneously.

(To be continued.)

THE *Liverpool Albion* records the death of a man seventy-two years of age, who had long been in the habit of consuming a pint-and-a-half of laudanum and a gallon of rum weekly. He was a publican. The cause of death is not mentioned.

ORIGINAL CONTRIBUTIONS.

REMARKS ON HOMŒOPATHY.

By SAMUEL WILKS, M.B.

Seeing that in some of the late numbers of the *Medical Times* the subject of Homœopathy has been under discussion, I beg to offer a few remarks respecting it. The occasional reference to irregular modes of practice I believe to be useful, if not necessary, as it provides the medical man with a weapon of defence, when attacked in private, or consulted in courts of justice, as occurred lately at Guernsey. It becomes, therefore, a matter of necessity to us, if not a duty, to investigate the subject somewhat, to prepare us for all emergencies. I say a duty, for besides the investigation of all new doctrines which the ardent promoter of science will always pursue, it is often necessary to ease the mind of a patient, by being able confidently to tell him that he can hope for no assistance from those who proffer it so boastingly. For my own part, I have found it useless to say that the promulgators of this new doctrine have been long ago attacked and vanquished, but have been forced to read for myself some homœopathic works, so as to repel the charge of being blindly bound by a bigoted faith to an antiquated and unreasonable system. I may state that, never having previously read any books on the subject, either favourable or antagonistic to their views, whatever I say will be entirely my own thoughts, and if any remarks be old, as doubtless they may, so much the more shall I be fortified in the conclusions I myself have come to. Although it may with reason be said, that all opposition to a false system only tends to strengthen it, yet I think it acts only thus, when coupled with raillery or abuse, and not where a fair and reasonable exposure of its false tenets is made; which, on the other hand, must do good if it counteract only the yearnings towards error which may be going on in some wavering minds.

In the first place, then, the great fallacy of the homœopathic system is one which, probably, has been pointed out ere this, and which strikes at its very root; and that is, that its motto, on which all is based, is untenable, as drawn from the writings of its advocates; so much so, that if the doctrine were strictly defined according to any one treatise, it would utterly condemn any other five. Let any one take up a homœopathic book, and, after perusing any illustrative case, see, when strictly analysed, if it be treated on the same principle as the next he may turn to.

In a very popular treatise (Sampson's) which has gone through more than one edition, the variety of meaning given to the homœopathic law (?) is quite ludicrous. I will mention one or two of the most general interpretations found in all their writings, though a close investigation of the various cases would show an almost endless variety of shades of meaning given to their great principle. In the above-mentioned work, as well as that of Dr. Epps and others, the authors begin to explain the meaning of the words "similia similibus curantur" by saying, that a disease is cured by those remedies which, in a state of health, produce symptoms like it, but which cannot exist in conjunction with the morbid ones, and necessarily drive these latter out. Owing, however, to ignorant persons supposing that no better remedy could be given than a repetition of the very cause which produced the disease, (if such existed in a tangible or active form as a poison or miasm,) a nicer explanation of these words is given than probably we should have had. To prevent the administration of a second dose of poison to a person already suffering therefrom, we are told that the word "similibus" does not mean *sameness* of symptoms, but merely *likeness*. Thus, in arsenic-poisoning or pneumonia, the homœopath would not repeat the poison, or expose his patient to a fresh cold, but administer remedies which should produce symptoms merely like those of arsenic-poisoning in the one case, or pneumonia in the other. This, which there is no practical attempt to prove, is yet reasonable as a speculative theory. The explanation, however, is soon forgotten when, in the warmth of argument, cases crowd in to prove the universally applicable doctrine drawn from the practice of the allopath (as the homœopath facetiously calls the ordinary practitioner.) For example, most of their books say: Is not the administration of an emetic in cases of sickness caused by indigestion, an instance in proof of homœopathic practice? For is there not here a morbid affection cured by the artificially setting up of a similar action? Apparently it may be so, but in reality is opposed to the interpretation of the doctrine just given. In the first place, the action induced is not only *like* the original one, but is *identical* with it, or, if not so, it is for them to show that vomiting is a different action as caused by crudities in the stomach from that caused by a dose of ipecacuan. For my part, I see no difference. It is, in fact, the same identical action increased for a certain purpose. Would they allow that, in a case of erysipelas or epilepsy, the symptoms were increased even for the shortest duration. I think not; yet such is the case in the present instance, where the benefit is allowedly from the increase of symptoms. In the above named diseases, however, the homœopath would say, that his medicine did superinduce similar symptoms, though not apparent. All he would wish a bystander to see would be, that the original symptoms disappeared. Such, I say, is very different from the present instance of the action of an emetic in vomiting. I do not go into the merit of the treatment of these cases; but only show, that such contradictory instances cannot both be samples of the same law, unless, as we shall find, that "similar" is a word of the largest and most accommodating signification. Many cases will thus be found to be treated according to the first interpretation; that is, where the cause of the disease, being a tangible one, it would be awkward to repeat it, it is said that the object is merely to produce symptoms *like* the morbid ones, and so an escape is made to another remedy. Again, many other cases given will be found coming under the second interpretation, such as the dose of ipecacuan in vomiting from indigestion, already mentioned; also the popular mode of giving a purge when diarrhœa has succeeded improper food; the rubbing the nose with snow when frost-bitten, or holding the finger to the fire when burnt,—all very favourite instances of homœopathic writers, and brought forward to show, that the *same* cause which produces a morbid action is also curative. Many other isolated cases might be mentioned in proof of this meaning, such as cases of scurvy produced by vegetable juices, which we know are the very remedies that cure the disease. The Author does not say symptoms like those of scurvy were produced, but actual scurvy, pronounced so by all who saw the cases. Now, here certainly is the case of a disease cured by the very cause which produced it. What objection, therefore, is there from analogy, in cases of poisoning by arsenic or prussic acid, to repeat the dose. I will give a quotation from a tract now before me by Dr. Malan, and ask the reader, if cases are not here bound together by a most superficial likeness:—"Mercury cures various sorts of sore throats, because it produces similar symptoms when taken in health; the same is true of bark which cures ague, because it creates, when taken in health, symptoms similar to those of ague; true of ipecacuan, which cures vomiting; of coffee, which removes wakefulness; of rhubarb, which, as a purgative, is the best remedy against diarrhœa, and it is true of all other remedies without exception. In nature, also, no one brings a frost-bitten limb near the fire, but, on the reverse, applies snow to it. A scalded part is not cured by cold water, but by the careful application of warmth." Now, the author of these lines must know that, whatever superficial resemblances these cases bear to each other, they are really unlike; or if not, I ask him to throw away mere words, and state with rigorous exactness the *modus operandi* of the remedy in each of these cases, and see if they all accord. I will not trouble him now to show the uniformity of the doses in each, which would be an equally difficult task. Dr. Epps, too, and others, bring forward all the above instances on the same page. He also must show that they have a nearer resemblance to each other than his mere words convey. In lines following each other, this Author says, ipecacuan cures vomiting because it produces vomiting in health; but he does not say, when administered, whether its

object be to produce vomiting or to allay it. The *former*, however, is evidently meant. Again, he says, ipecacuan cures asthma, because, in health, it produces it; he does not say, when administered, whether its object be to produce asthma or allay it. The *latter* here is meant, however. I will only trouble you with one more meaning of this proteus-like doctrine; but one which could not be believed to be asserted were it not found in print. The *rationale*, remember, is not stated,—it is only gathered by inference from the nature of the case. Mr. Sampson quotes cases from Dr. Elliotson and others, where a fatty discharge took place from the intestine, and this physician, in the absence of any knowledge on the subject, prescribed olive oil for the patient, and the symptoms ceased. One naturally looks for the application of the "similia" in this case, and finds the only likeness at all apparent is between the *remedy*, olive oil, and the fatty discharge. Does this, in the slightest degree, come under the interpretation of the doctrine as given in either of the above ways. The only likeness here is between the *products* of disease and the *physical character* of the *remedy*, apart from all therapeutic action. Of this kind, also, is Dr. Epps's case of the application of cold water to cholera patients, because the surface of their bodies is cold; the resemblance being here between the physical properties of the body and the remedy; for he must well know that the *effect* wished to be produced is warmth and not cold. When instances of mental disease and derangement are given with their treatment, the sophisms are so great, and the distinctions of words so subtle, that it would require the quotation of every single case to show how the treatment varied in each. I will give a case as a sample:—A lady, with a family, being in a great state of dejection from the loss of one of her children, is advised to retire into the country; she does so, and her sorrow leaves her. An ordinary person would give to the change of scene the credit of cure; but no, we are gravely told that the leaving the other children produced a counter sorrow in her mind, which expelled the first. Not that she ever felt any fresh grief on leaving her home, (which would be analogous to the case of vomiting); but such is merely the theoretical explanation. Again, there is a wish to benefit the character of a proud egotistical man; but, says the homœopathist, to tell him of humility would only provoke him, and therefore you speak to him of the dignity of man as the more reasonable mode of cure. Let me draw attention to this case as an example of the extreme sophistry of their writings. Every one can discern, that when the dignity of man is spoken of, it does not at all apply to the individual's personal feelings, but being used in a universal sense, it really applies to all other men but himself; in fact, an opposite mode of treatment is adopted to the one intended to be conveyed to the reader. An epidemic occurred some years ago in Sweden, of which the most remarkable symptom was, that the patient, with a voracious appetite, constantly complained of hunger. After many remedies, a successful mode of treatment was found by abstinence from food for some time. This appears reasonable, upon the supposition that an irritable organ was thus allowed a period of rest. The cause of cure, however, says the homœopath, was strictly according to his doctrine, because hunger being the prevailing symptom, such a mode of treatment was adopted which in health produces hunger, *i. e.*, abstinence from food. Such an explanation, I think, none but a homœopath can fully comprehend, any more than in Dr. Epps's case of a knock on the knuckles being cured by rubbing, because by this means is produced a succession of little knockings. These are a few examples of the sophisms and jugglery of words, of which so much of the homœopathic literature is composed. How a law founded on the observation of nature can change its meaning to suit circumstances, I leave them to show.

I did not intend any further remarks, as the discovery of such a tottering foundation I thought sufficient to weaken any superstructure that might be raised thereon. However, I will add a few more remarks on some of the inconsistencies and errors of homœopathic reasoning. With reference to cases in proof of the doctrine which the Hahnemannists draw from ordinary practice, such as the emetic in vomiting, the purge in diarrhœa, the snow-rubbing in frozen nose, the cure of ague by quinine, syphilis by mercury, or scabies by sulphur, do they, in quoting these cases, condemn the practice, or act upon it as being strictly homœopathic; and if the latter, do they use the ordinary doses or the infinitesimal? Before the introduction of the small dose system, I suppose they adopted the former practice; but now, being against their principle, they must produce vomiting by an infinite dose of ipecacuanha, cure ague by a like dose of quinine, and the frozen nose by the most delicate amount of friction. Perhaps, as being cases most easy of proof, they would exhibit for our instruction ten cases of ague cured by an infinitesimal dose of bark. In all quotations from our practice in proof of their doctrine, the homœopathists, with their wonted unfairness, choose any disease they like, which is benefited by a remedy, leaving alone a multitude of others which do not suit their purpose. Thus, because mercury produces syphiloid symptoms, they dwell much on that, forgetting whether it produces symptoms like the fifty other diseases in which it is equally useful, though no doubt they would find in the hundred of symptoms which they say arise from the smallest dose of medicine, some which would resemble every disease in the nosology. Quinine, again, is said to produce symptoms like those of intermittent fever; but is not this drug useful in a number of disorders? And on what method of homœopathic reasoning does it act simply as a tonic? As regards the question, as to whether quinine does produce aguish symptoms, the *onus probandi* still lies with the homœopath, in spite of the solitary instance so often quoted of Hahnemann himself, and which led him in a moment to frame a theory. Until there be exhibited other cases, we must still disbelieve; for, although not exhibited in health, the action of quinine is seen daily in such a variety of cases, in many persons merely debilitated, and with very little departure from health, that an approach to such periodic fever state would surely be noticed. An elaborate paper read lately before the Académie des Sciences, gave likewise no such results as the homœopathist states.

Then, as regards the theory of disease, most homœopathic authors agree, that symptoms cannot rightly be called morbid, but rather that they are healthful actions on the part of Nature, to get rid of the noxious cause. For this reason they blame us for attacking and repelling symptoms, and state, as a rule, that all medicines should have for their object, the assisting the nisus Naturæ. This theory, it will be seen, can agree only with one interpretation of their doctrine, that which is exemplified in the case of vomiting, treated by an emetic, or diarrhœa by a purge. It certainly cannot apply to the treatment of their acute diseases, whose symptoms they say abate immediately after the administration of their remedies. Much of the treatment, then, of those who hold this doctrine, will be found utterly incompatible with it. As an example of the extent to which such a notion may be carried, it is said that apoplexy is a disease tending to health, since the nisus is to get rid of a superfluity of blood. Even if it were not known that this affection is dependent upon the state of vessels rather than the blood, it would be absurd to think of Nature relieving herself of her fluids in a place which can hold only an ounce or two, and where it must produce, in most cases, a fatal result. The same author, who holds this doctrine, violently condemns the practice of bloodletting, though, according to his own theory, it would, in such a case as this, be strongly indicated. Now for a word or two about the small doses. The only argument I can find theoretically offered (except those which refer purely to nervous agency) in their favour is, that the tissues of the body, being microscopically minute, it necessarily follows that the medicines which act upon them must be proportionally minute. This I think all will agree to, but unless the Hahnemannist supposes the morbific cause located in an infinitely small spot, why should he not allow the remedy to be multiplied in like proportion to the amount of organism acted on. A grain of calomel, one would think, was sufficiently divided, when, seeing the whole of the liver acted on, he must know that each secreting part has received its quantum of the mineral. That medicine acts entirely through nervous agency when applied to the tongue, is, probably, the *rationale* which homœopathists will universally adopt; and so, by taking for granted this still disputed physiological doctrine, they will avoid all future difficulty of explanation as to its *modus operandi*. A chemist was loudly ridiculed because he attempted to analyse a globule of some active medicine, thinking, in his ignorance, it was sensible to chemical re-agents. The fact of charcoal, sulphur, lime, &c., which, they say, (as we all well know,) can be administered in large quantities without any sensible effect on the system, being powerful agents in the millionth division of grain doses, would tend to establish a law which many tacitly acknowledge, that matter is powerful in the inverse ratio to its quantity, which is quite a new philosophic law.

An argument against small doses is, I think, to be found in the analogies of food; for the distinction between food and medicine is often not so great that a difference in their action can be instituted. If a patient be out of health from the want of a proper ingredient in the system, and that be subsequently administered, it matters not whether that treatment be called medicinal or dietetic, so that the natural standard of health is restored. Such examples are found in the cure of scurvy by lemon-juice, or anæmia by iron; and in these a certain quantity of the remedy is required, varying in proportion to its want in the system; and, doubtless, many other remedies act, by supplying, removing, or altering in quantity the various ingredients which are required for the proper organization and healthful action of the body. None of the aliments taken into the system bear any proportion to the infinitesimal doses of the homœopath. Look at such which form only the least part of the tissues, viz., the salts; these, we know, exist in large quantity in the water we drink, as a little oxalate of ammonia or nitrate of barytes will soon discover, and in much more abundance in the medicinal waters; for example, the chalybeate, which can be taken for many weeks with advantage, contain so much iron as to rust everything with which they come in contact. I now, then, offer another question for the reasonable homœopath to answer: How does he treat chlorosis and scorbutus?

It is very evident, from the perusal of homœopathic writings, that their various medical tenets have followed, as consequences, from the endeavour to preserve the original doctrine intact, or from spontaneous dissolution; for the natural sequences of that doctrine would very evidently lead to very strange and lamentable results. It was thus that the small-dose system was introduced, to avoid the mischance of poisoning the patient; and, however cunningly the homœopath may say that this system has nothing to do with his primary doctrine, we say it has everything to do with it, for it is under this cloak that he preserves himself unassailed. While he continues to ask why the system itself is not attacked, rather than its details, he knows well that such is utterly impossible, when the truth has to be arrived at through those means which we utterly disbelieve, and *vice versâ*. Therefore, I repeat that, so far from the small-dose system having nothing to do with the principle, it has everything to do with it. One doctrine is entirely protected by another assumed doctrine, which utterly prevents itself from being attacked by such means as would be open to all. Having embraced a dogma, there is no end to the various other dogmas which it necessarily brings in its course. I say, the small-dose system followed as a necessity from a perilous Medical theory. Its opponents could well see this, and that the homœopath, thus subtly avoiding his own principle by giving his remedy sparingly, was obliged to make another assumption, which was, that his infinitesimal dose was equally effectual with the larger one. Some have attempted to prove this by allusions to the microscopic in nature; others, not being able so to do, say, that their infinite dose is equally powerful with the large, and so are obliged to make a still further assertion, that it gains great power by trituration. The history of these doctrines shows that they followed in this order. See to what extraordinary lengths a man is pushed who will strictly defend a dogma. Of what kind of character is the power possessed by their remedies, it is difficult to determine.

The same men who speak of the efficacy of minute doses, also speak of their acquired powers by trituration. From the latter, we should infer, that a very considerable effect is produced on the system by a medicine as powerful as our own; and from the former, that the body is acted on by such slender means as can only be compared to the odour of a flower or the impingement of a ray of light upon the retina. In one place of a book, (Dr. Epps,) in answer to the charge, that homœopathic medicines act alone on the imagination, the great power of their doses, especially when triturated, is much dwelt upon. In another place, in reply to the ridicule thrown upon the infinite doses, it is said, "Is fear, which can throw an individual into convulsions, or sorrow, which can turn the hair white, material?" How are these two statements to be accommodated? With regard to the doctrine of trituration, I must say a word or two, as it involves one of the grossest assumptions that was ever met with in any Medical writing.

Giving him all the benefits of prior experience, let us see what was necessary to Hahnemann before he could reach the conclusion respecting the times required for the triturations of his medicines. In the first place, he must have selected, say, ten patients, labouring under the same disease, and to these he must have administered his remedy after a certain amount of trituration. After carefully noting its effects, he must again have administered it, after another definite amount of rubbing, and so again a third time, until, say the tenth. From all these experiments he would have got a result, which, to say the most of it, would only be an approximation to the truth. Supposing, however, he did arrive at absolute certainty as to the dose of medicine and amount of trituration (on this minimum number of observations of ten trials each on ten different patients), it would certainly have occupied him many months in the accomplishment. Let him, however, have found the doses and amount of trituration necessary for the due activity of the same medicine in other diseases, and it would unquestionably have taken many years; and a few other such trials on other medicines would have taken a life-time. Here is a man, however, who gives the times of trituration necessary for all kinds of medicines, besides the thousands of symptoms produced by their administration, and all as his own experience. The thing is too palpably gross to be credited. Besides, it will be seen that the times and doses mentioned are all in round numbers, and evidently dictated by the mind or a tired hand, rather than by experience. In all probability, if one medicine required three minutes' trituration and another four, a third would require an intermediate time, for one would suppose, according to their own theory, that a few seconds' rubbing, more or less, would add or detract from the efficacy of the dose most materially. Also, if the remedy for one disease is found particularly valuable at the nonillionth dilution, and for another at the decillionth, it does not seem unnatural to suspect that other diseases would be greatly benefited by any one of the different millionth dilutions between these two round numbers. The complication of figures, however, would, either in the trituration or the amount of the dose, be so great, that the present round numbers show clearly that the whole is merely a mental fabrication.

If enough had not already been said, one might still further expose many more of the homœopathic doctrines, such as the origin of all chronic diseases in three causes alone, &c. &c. The organon of Hahnemann can have no better antidote than its great namesake.

In conclusion, I beg to offer a few remarks in answer to a very common argument or reason, which is supposed to tell somewhat in favour of homœopathy. It is, that it is a practice supported by our nobility, clergy, gentry, and the more enlightened of the community. I believe that this is in some measure true, but easy of explanation. In the first place it must be remembered that our art is still confessedly a very imperfect one; it is as yet only progressing towards a science, though certainly the path in which it treads is a philosophic one. It is waiting its Newton to generalize its facts and grasp their meanings. This imperfection, however, does not meet the public taste of the present day. Every science must now be made popular. Its truths must be revealed to the ordinary hearers of a public lecture. People require to see the meaning of what they do, or at least to fancy they see it. If this is so in all things else, it cannot be wondered that it is applicable to the subject of medicine, in which all are interested, especially the Englishman, who is known as supporting as many druggists as he does bakers shops. Now we may deplore the fact, but so it is, that many of our best practitioners have the fewest theories in pathology or therapeutics, or perhaps they have none at all, and though these men must be nearest to the truth, as was young Newton, without any theory of the stars, wiser than all those who confided in the Ptolemaic, yet they cannot satisfy that class of people who will be only pacified with reasons. The mass of people and the really enlightened are very well satisfied, but it is the clever class who want something more; they cannot, they say, take on faith the dictum of the physician, and, like Loyola, see their lives ebbing fast from ill treatment, and think it heresy to raise their voice against it; they must know and be satisfied of the rationality of what is being done. These people, however, not having the wish or ability to weigh through the mass of evidence on which our philosophic art is based, but regarding it merely as a heap of confusion, grasp at any theory which is easily discernible, and such a one soon presents itself in the shape of homœopathy. Every Medical man is aware how, among the more knowing of the community, he is questioned as to the causes of disease and the actions of medicines, things of which, above all others, he knows least, and how poor a chance he stands against the man with his semi-scientific reasoning of which the patient discerns sufficient to see that it and the author are both very clever. I think all will agree with me in saying, that homœopathy has its stronghold among such a class of persons, and that the cause is as above stated; for, according to my own experience, a homœopathic patient does not mean one who is under its treatment merely, but one who reads homœopathic books, and argues all its doctrines with opponents, and is, in fact, a sworn champion in the cause. The great movements do not take place so much among the practitioners as among the public, and this having in its number many merchants, bankers, &c., we can see why the system has so flourished, and why money can be subscribed to support, and dinners to celebrate it. I believe, however, among its principal supporters will be found the ladies, who are seen everywhere going about making proselytes.

I think if we were more openly to allow that our art is still in a state of progression,—that we are still storing up facts, and open to any new theories which may be advanced, we should give no shadow of opportunity for being called unreasonable, stationary, and dogmatic, and assaulted by quacks, as though we considered our art perfect and arrived at its climax. As it is, we cannot, with any justice or truth, be attacked in this way, as any one may convince himself by taking up any of our first works on the practice of medicine, where will be found authors ready to consider theories however novel. The fact is, that we are too apt to be led away by new theories,—to have the doctrines of a Boerhaave, Brown, or Rasori, startling for a time, though soon again to die; and there are many, indeed, who believe, and not without reason, that the time is still distant that shall see our bundle of facts worked out into any great general laws; indeed, one of our first philosophers (John Stuart Mill) believes that, from its very nature, the medical art will be the last perfected, because admitting evidently of the greatest difficulties in a correct accumulation of data, except (says this author) it may be that of the political or social science, which is still in its infancy, although now and then that gives signs of maturity when a Bentham appears, who, however, is soon discovered to have philosophised prematurely. We cannot, then, be too guarded against medical theories, for, as Bacon says, "it is an error to be over-early and peremptory in the reduction of knowledge into arts and methods, from which time commonly receives small augmentation; for method, carrying a show of total and perfect knowledge, has a tendency to generate acquiescence;" and, to use his own favourite simile, they are like the golden apples of Atalanta, which, though beautiful, impede the way, and so prevent the ardent striver for the prize from winning the goal.

The battles in medicine have been generally about remedies, while the great truths in physiology and pathology have been left to be evolved by those who have pursued the quiet and orthodox course. None of the irregular medical literature, including all the homœopathic writings I have ever seen, contains a word about the history or anatomy of disease, but rather shows too often a want of knowledge of these subjects, which are so important to the due understanding of all medical doctrines. I am not aware that the homœopathists have advanced the science in these ways in the slightest degree.

Such, then, is the skeleton of my thoughts and conclusions on this subject; and my purpose of sending it to you will be fulfilled, if it may put an argument in the mouth of any inquirer after truth, and who may be enticed, by the many siren voices who may attempt to allure him from the path of science, into those where nobility and wealth temporarily shine. I have given this subject my calm investigation, and, being bound down to no system whatever, I have had everything to gain from any new truth it might discover to me, and even have been ready to adopt such opinions as were reasonable; for what do any of us want more than the advancement of science and the welfare of the community? I rise, however, from the inquiry with a stronger faith in the reasonableness of following the old and ordinary pursuit. Of course, I, with others, am open to well-tested facts, but such I have not yet met with. Ordinary cases, such as hysteria and scarlatina, I have seen get well in their hands; but those which have been unsuccessful in ours, as epilepsy, have also failed in theirs. It is the theory and reasoning I have alone attacked, than which it has never fallen to my lot to have read worse. In one book, it is very evident that the word *similia* is a mere catch-word, and that, consequently, all cases, from whatever source, medical or non-medical, from all parts of the world, and relating to all subjects, have been unsparingly dragged in, wherever the word *like* was at all apparent. It mattered little whether the likeness was between the names of the real and artificial disease, or between the morbid symptoms and those produced, or between the remedy and the disease, so that a likeness existed somewhere, and it added to the list of facts (?) In cases relating to mental phenomena, the support of the doctrine has depended often upon the word made use of, and where a synonyme would utterly have ruined it. The exposure of this indefinite law was the principal object of my communication. It is for those whom I have opposed to establish its true and definite meaning by a strict logical method, with a few cases by way of illustration. Until then, it must be regarded as utterly senseless, or of such a character, that its meaning eludes your grasp at every attempt to seize it.

I will conclude my lengthy communication by an apposite quotation from Sir J. Mackintosh:—"A system subjecting vast provinces of knowledge to one or two principles, and, if presenting some striking instances of conformity to superficial appearances, is sure to captivate. When systems, in some instances, have appeared sufficient to give an unexpected explanation of facts, the delighted hearer is contented to accept as true all other deductions from the principles. Thus the system-maker has immense power. He must have acquired an overwhelming conceit in the superiority of his judgment, to make him espouse very singular notions; but, when once embraced, they are only the more endeared to him by the hostility of others."

Camberwell, April 17, 1850.

OBSERVATIONS ON TRANCE, OR HUMAN HYBERNATION.

By JAMES BRAID, Esq., M.R.C.S., Edinburgh, &c., &c.

In the year 1845 I published some observations on the remarkable feats of the Fakeers of India, who had been represented as having acquired the power of suffering themselves to be buried alive, enclosed in sealed bags, shut up in boxes, or even of being buried for days or for weeks in common

severe shock, as from great injuries — *traumatic coma*, 4thly, and here the analogy with delirium fails, we have coma arising from *compression* of the brain, as from an injury to the skull with depression of bone, or hæmorrhage within the cranium, from the effusion of blood on or into the substance of the brain, or from fluid in large quantity poured out into the cavities of the brain. 5thly. Coma will occur, and now the analogy returns, in rheumatic fever, in gout, in severe visceral inflammations, either after or independently of delirium. 6thly. We have it after great losses of blood, either after or independently of delirium, and in states of anæmia, without loss of blood; and lastly, we have the *toxic coma*, arising from the direct ingestion of a poison as of alcohol or opium.

Epileptic Coma.—It will be unnecessary for me to dwell at any great length upon the clinical history of the epileptic coma. Like the epileptic delirium, it may occur before or after, or before and after, a convulsive fit, or it may occur without any convulsive fit, and it may be preceded or followed, or both preceded and followed by delirium. A man may fall into the comatose state suddenly, without previous warning, and remain in it a longer or shorter time, and come out of it without having suffered any apparent mischief,

The most perfect example of this kind of coma is afforded by what Esquirol calls the *epileptic vertigo*, the *petit mal*, the epileptic paroxysm without convulsions—a form of epilepsy which is often highly destructive to the mental powers, especially when the attacks succeed each other at short intervals.

There are many instances in which men have had attacks of this kind of coma once in their lives, without any recurrence; and, the attack having occurred shortly after a meal, has been attributed to indigestion, and perhaps not without cause.

It is seldom that such an attack will take place wholly without convulsions, although they may escape the notice of bystanders. At the very commencement of the attack, there will be a short convulsion of the muscles of the larynx, and perhaps also of those of mastication and of the eyeballs; and it is this convulsion which determines the congestion of blood in the bloodvessels of the brain, which is sometimes found after attacks of this kind, and to which some attribute the phenomena both comatose and convulsive. In such attacks the course of events is this—a change takes place in the brain, caused either by mental emotion, or by some physical influence,—an abnormal development of the nervous force is produced—consciousness is instantly destroyed—the patient remains in an unchanged attitude, or he falls—and simultaneously with, or instantly after, the destruction of consciousness, the convulsive affection of the laryngeal muscles, and perhaps also of the muscles of mastication, takes place, and immediately subsides; the coma remaining for a longer or shorter time, and sometimes killing the patient in a very few minutes.

The condition, called by Dr. Abercrombie *congestive apoplexy*, may, as it seems to me, with more propriety, be referred to this state of *epileptic coma*. I shall quote one of the cases related by Dr. Abercrombie, for the purpose of comparing it with two similar cases which occurred in my own experience.

"A gentleman, aged 24, had been observed for some days to be dull and drowsy, and he frequently complained of his head. Not having appeared at his usual time one morning, his friends went into his room and found him lying across his bed, half-dressed, in a state of perfect apoplexy. The attack was evidently recent, and it was supposed that he had been seized while he had been stooping over his basin in washing. His face was rather livid, his breathing stertorous, his pulse slow, and of good strength. All the usual remedies were employed with assiduity, but through the day there was no change in his symptoms. In the course of the night he recovered considerably, so as to know those about him, but, in a short time after, he relapsed into coma, and died early on the following day, little more than twenty-four hours after the attack.

"*Inspection.*—There was a slight turgescence of the vessels on the surface of the brain; no other appearance of disease could be detected after the most careful examination. All the other viscera were in a healthy state."

The first case of this kind to which I shall refer from my own experience is one which excited much interest at the time it happened, in consequence of the great respect in which the individual who was the subject of it was generally held.

He was a tall, stout, well-made man,—had just completed his 55th year. He was well known in the scientific world, and not more admired for his high intellectual qualities than for his kind and amiable disposition. Of all the men I ever knew, there was none of whom it might be more truly said, that he was

Integer vitæ scelerisque purus.

I enjoyed the high privilege of having been on terms of the closest intimacy with him for many years, and was well acquainted with the state of his health and constitution, which I had no reason to believe were otherwise than sound.

He was of an ardent but extremely cheerful temperament; he was anxious and easily excited, but possessed great sweetness of temper. At the time of the fatal occurrence he held the office of Foreign Secretary to the Royal Society; a subject was under discussion at this time about which he was excited rather more than his usual evenness of temper generally permitted, or than the intrinsic importance of the matter in question justified, a circumstance which led me to apprehend that he was out of health, although I could not detect any other satisfactory indications of it. At one of the Thursday meetings of the Council, which was very fully attended, he addressed the members present briefly on the subject of discussion, but in such a manner as led those who heard him to think that he felt very warmly upon it. Shortly after he had resumed his seat, he was heard to make a gurgling noise in his throat, and his eyes were turned convulsively upwards. He was caught just in time to prevent him from falling, and was laid on the floor in a state of coma, foaming at the mouth, and breathing with some degree of stertor. There were several medical men present, and as he did not seem readily to show signs of recovery, it was judged expedient to bleed him. The blood flowed readily, but as the pulse very soon showed signs of failing, the arm was soon tied up. He never rallied from this state of coma, and died in less than a quarter of an hour after the attack.

I was present at the *post-mortem* inspection which took place on the following day. There was not an unsound viscus in the whole body; the brain was essentially healthy, but exhibited at parts, especially where the small branches of the middle cerebral artery penetrate the fissure of Sylvius, a considerable degree of congestion. Some doubts might have existed as to the perfectly healthy state of the kidneys; but it may be certainly affirmed respecting them, that if they were at all in a morbid condition it was a very early and slight degree of chronic nephritis.

This was a case, then, which Abercrombie would have called *simple apoplexy*. It seems to me a more reasonable view to suppose it to have been one of epilepsy or epileptic coma, and although the patient had never previously shown any symptom of such a disease, yet his excitable temperament, and the strong emotions under which he laboured and which he used great efforts to control, were quite sufficient to develope such an attack, more especially if there had been any incipient disease of the kidney.

In a second case, where the attack was equally sudden but the event not so rapid, the distinct existence of renal disease denotes the truly epileptic nature of the attack. A respectable tradesman in the Strand had been some time suffering considerable anxiety in consequence of the depressed state of trade, and had experienced for a few days a feeling of giddiness in the head, to which, however, he paid no attention. On the evening of the 11th March, 1848, as he was walking from one room to another he fell as if shot, not insensible, but paralysed on the right side; he was like one who had experienced a sudden shock,—cold, depressed, with a feeble heart and pulse. He was almost instantly attended by my friend, Mr. Duncan, of Henrietta-street, Covent-garden, who is a most judicious Practitioner. This was at six o'clock p.m. At that time Mr. Duncan found it impossible to do more than take a small quantity of blood by cupping from the back of the neck. At eight o'clock he became completely insensible, with contracted pupils, and breathing heavily. He was now bled from the arm to 4 or 5 oz. without any effect; and he continued in a state of profound coma, perfectly insensible, without any great stertor until nine o'clock the following night, when he died: just twenty-seven hours after the attack.

The symptoms were such as led me to expect a clot of blood in the corpus striatum of the left side; but a most careful examination of the brain disclosed no diseased condition of that organ beyond a little shrinking. There was a great deal of subarachnoid fluid, and one or two drachms of fluid in the ventricles. The kidneys were contracted, and distinctly in the state of the so-called chronic nephritis.

There is a distinct connexion between chronic disease of the kidneys and this form of coma, just as between the same form of renal disease and the epileptic delirium. The coma connected with renal disease will come on under three forms:—1. Suddenly, becoming profound and passing to a fatal termination; 2. Gradually, and also passing into the profound state; and, 3rdly, in paroxysms presenting an exact resemblance to the epileptic, either of coma simply or of coma with convulsion, or of either or both accompanied with delirium. And the state of the urinary secretion varies, always, however, presenting a decided departure from the normal state, being either wholly suppressed or greatly diminished in quantity, or even increased in quantity, with low specific gravity. The more serious head symptoms will occur in those cases where the deficiency of the urine or of its solid contents is most marked. In nearly all cases the urine contains albumen.

The cases of ischuria renalis, as it has been called, long recognised by practitioners, and graphically described by the late Sir Henry Halford, must be referred to this variety of coma.

Coma in Dropsy after Scarlet Fever.—The coma which comes on in dropsy after scarlet fever is of this kind. A child has gone through a mild attack of scarlet fever, dropsy developes itself universally after two or three days, the urine is very deficient in quantity, and, after a day or two, the child falls into profound coma and dies. On examining the brain no morbid change is discernible, excepting that the organ looks pale, in common with the rest of the body; but the kidneys exhibit the characteristic signs of the acute disease which is so common when the scarlet fever poison has been received in large doses or imperfectly eliminated by the skin.

Coma in Acute Dropsy.—So, also, after acute dropsy, coma will come on, and either kill the patient or greatly endanger life, and the same appearances exactly as in the scarlet fever dropsy will present themselves. Or, as is I believe a very frequent occurrence, an acute affection of the kidneys will supervene on a previously existing chronic affection, and kill the patient by coma in a few hours. Many a case of rapid death is, I have no doubt, due to this form of coma, the renal affection having been undetected during life, and perhaps overlooked after death. A man may have had chronic renal disease creeping on insidiously, and so long as a sufficient quantity of water had been eliminated through the kidneys no symptom sufficiently serious to lead him to seek medical aid would occur. But presently he would be exposed to cold, or his digestive organs would become much deranged, the kidneys fail in their action, "the pitcher is broken at the fountain," and fatal coma ensues.

Comatose affections of this kind are sometimes extremely slight, and even momentary; but, however slight they should be carefully investigated, and especially with reference to the powers of excreting the urine. Mild forms of what are called *paralytic strokes* are sudden attacks of epileptic coma, which may or may not be accompanied with paralysis, which, when it does occur, is frequently quite transient, just as the paralysis after epilepsy is. A gentleman, aged fifty-two or fifty-three, was under my care the greatest part of last summer for chronic disease of the kidneys. He appeared to be going on well, when one night I was hastily summoned to him, the messenger stating that he had had a paralytic stroke. I found my

patient sitting up in bed, in a state of great alarm, and he informed me, that just after he had got into bed he was seized with a sudden loss of consciousness, which lasted scarcely a minute, and that he felt a loss of power on the left side of his face, and there still remained a sluggishness of motion on that side which lasted two or three days. Three months afterwards, this gentleman, having continued in his usual health during that period, while staying at the house of a friend in the country, was seized with another similar attack, from which he recovered for the moment, but speedily relapsed into coma, and died in a few hours. I had no opportunity of examining the brain, but the existence of renal disease admitted of no doubt.

I have some reason to think that obstacles to the excretion of the urine at the bladder may occasion comatose affections of a similar kind. Not only "may the pitcher be broken at the fountain, but the wheel may be broken at the cistern." Last autumn I saw a gentleman of 60 years of age, an eminent solicitor in Lincoln's-inn, who, while talking with a client, received a sudden stroke, creating a momentary loss of consciousness, and a sense of numbness on one side of the face and body. I saw him immediately afterwards, and found him greatly alarmed; but, on making him keep the horizontal posture, and take some ammonia, he completely recovered, and went home to his residence a little way from town, where I saw him two days afterwards, along with Dr. Cobb, of the London Hospital. After most careful examination, we could discover no evidence of renal disease, nor any cause for his attack besides over-work in his profession. It appears that afterwards he had a repetition of the attacks, although he had given up work, and gone into the country for change of air; and it was now found out, that he experienced some difficulty in micturition, owing to an enlarged prostate gland. This was relieved by mechanical means, and since then there has been no recurrence of the attacks.

In all these cases of epileptic coma, the appearance of the brain and of its membranes, after death, affords no indication of the previous existence of any active morbid process during life.

If the immediate exciting cause of the comatose state be of recent origin, the brain will exhibit no morbid change; if few or no attacks have occurred before the fatal one, there will be no morbid change; but if there have been several attacks previously, as in ordinary epilepsy, there will be the same changes as we see in that disease—a shrinking of the convolutions of the brain, some opacity of the arachnoid, perhaps some adhesions between its layers, and more or less of fluid in the subarachnoid space, that fluid being the more abundant in proportion as the convolutions of the brain are more shrunk, the shrunk brain, with a large quantity of surrounding subarachnoid fluid constituting the condition which succeeds the so-called serous apoplexy of authors. Most, if not all, of such cases (excepting where the serum has been poured into the ventricles) being probably epileptic coma, either connected with ordinary epilepsy, or with some defective action of the kidney.

Hysterical Coma.—The hysterical coma is of very frequent occurrence, and sometimes resembles the epileptic so nearly, that it is very difficult to distinguish the one from the other. One characteristic of it, however, must be especially borne in mind, that it rarely, if ever, is perfect. Even in the worst of cases, some spark of sensibility remains, which may be lighted up by loud speaking, or shaking, or the dash of cold water, or pinching, and a power of performing voluntary acts, or maintaining certain attitudes, such as walking, sitting, &c. Again, while a patient may fall into this coma suddenly, he may come out of it with equal rapidity, and without any bad effect—a fact which sufficiently shows, that in this state there can be no such change in the condition of the brain as may not right itself almost instantaneously.

(To be continued.)

THE *Liverpool Albion* records the death of a man seventy-two years of age, who had long been in the habit of consuming a pint-and-a-half of laudanum and a gallon of rum weekly. He was a publican. The cause of death is not mentioned.

ORIGINAL CONTRIBUTIONS.

REMARKS ON HOMŒOPATHY.

By SAMUEL WILKS, M.B.

Seeing that in some of the late numbers of the *Medical Times* the subject of Homœopathy has been under discussion, I beg to offer a few remarks respecting it. The occasional reference to irregular modes of practice I believe to be useful, if not necessary, as it provides the medical man with a weapon of defence, when attacked in private, or consulted in courts of justice, as occurred lately at Guernsey. It becomes, therefore, a matter of necessity to us, if not a duty, to investigate the subject somewhat, to prepare us for all emergencies. I say a duty, for besides the investigation of all new doctrines which the ardent promoter of science will always pursue, it is often necessary to ease the mind of a patient, by being able confidently to tell him that he can hope for no assistance from those who proffer it so boastingly. For my own part, I have found it useless to say that the promulgators of this new doctrine have been long ago attacked and vanquished, but have been forced to read for myself some homœopathic works, so as to repel the charge of being blindly bound by a bigoted faith to an antiquated and unreasonable system. I may state that, never having previously read any books on the subject, either favourable or antagonistic to their views, whatever I say will be entirely my own thoughts, and if any remarks be old, as doubtless they may, so much the more shall I be fortified in the conclusions I myself have come to. Although it may with reason be said, that all opposition to a false system only tends to strengthen it, yet I think it acts only thus, when coupled with raillery or abuse, and not where a fair and reasonable exposure of its false tenets is made; which, on the other hand, must do good if it counteract only the yearnings towards error which may be going on in some wavering minds.

In the first place, then, the great fallacy of the homœopathic system is one which, probably, has been pointed out ere this, and which strikes at its very root; and that is, that its motto, on which all is based, is untenable, as drawn from the writings of its advocates; so much so, that if the doctrine were strictly defined according to any one treatise, it would utterly condemn any other five. Let any one take up a homœopathic book, and, after perusing any illustrative case, see, when strictly analysed, if it be treated on the same principle as the next he may turn to.

In a very popular treatise (Sampson's) which has gone through more than one edition, the variety of meaning given to the homœopathic law (*!*) is quite ludicrous. I will mention one or two of the most general interpretations found in all their writings, though a close investigation of the various cases would show an almost endless variety of shades of meaning given to their great principle. In the above-mentioned work, as well as that of Dr. Epps and others, the authors begin to explain the meaning of the words "similia similibus curantur" by saying, that a disease is cured by those remedies which, in a state of health, produce symptoms like it, but which cannot exist in conjunction with the morbid ones, and necessarily drive these latter out. Owing, however, to ignorant persons supposing that no better remedy could be given than a repetition of the very cause which produced the disease, (if such existed in a tangible or active form as a poison or miasm,) a nicer explanation of these words is given than probably we should have had. To prevent the administration of a second dose of poison to a person already suffering therefrom, we are told that the word "similibus" does not mean *sameness* of symptoms, but merely *likeness*. Thus, in arsenic-poisoning or pneumonia, the homœopath would not repeat the poison, or expose his patient to a fresh cold, but administer remedies which should produce symptoms merely like those of arsenic-poisoning in the one case, or pneumonia in the other. This, which there is no practical attempt to prove, is yet reasonable as a speculative theory. The explanation, however, is soon forgotten when, in the warmth of argument, cases crowd in to prove the universally applicable doctrine drawn from the practice of the allopath (as the homœopath facetiously calls the ordinary practitioner.) For example, most of their books say: Is not the administration of an emetic in cases of sickness caused by indigestion, an instance in proof of homœopathic practice? For is there not here a morbid affection cured by the artificially setting up of a similar action? Apparently it may be so, but in reality is opposed to the interpretation of the doctrine just given. In the first place, the action induced is not only *like* the original one, but is *identical* with it, or, if not so, it is for them to show that vomiting is a different action as caused by crudities in the stomach from that caused by a dose of ipecacuan. For my part, I see no difference. It is, in fact, the same identical action increased for a certain purpose. Would they allow that, in a case of erysipelas or epilepsy, the symptoms were increased even for the shortest duration. I think not; yet such is the case in the present instance, where the benefit is allowedly from the increase of symptoms. In the above named diseases, however, the homœopath would say, that his medicine did superinduce similar symptoms, though not apparent. All he would wish a bystander to see would be, that the original symptoms disappeared. Such, I say, is very different from the present instance of the action of an emetic in vomiting. I do not go into the merit of the treatment of these cases; but only show, that such contradictory instances cannot both be samples of the same law, unless, as we shall find, that "similar" is a word of the largest and most accommodating signification. Many cases will thus be found to be treated according to the first interpretation; that is, where the cause of the disease, being a tangible one, it would be awkward to repeat it, it is said that the object is merely to produce symptoms *like* the morbid ones, and so an escape is made to another remedy. Again, many other cases given will be found coming under the second interpretation, such as the dose of ipecacuan in vomiting from indigestion, already mentioned; also the popular mode of giving a purge when diarrhœa has succeeded improper food; the rubbing the nose with snow when frost-bitten, or holding the finger to the fire when burnt,—all very favourite instances of homœopathic writers, and brought forward to show, that the *same* cause which produces a morbid action is also curative. Many other isolated cases might be mentioned in proof of this meaning, such as cases of scurvy produced by vegetable juices, which we know are the very remedies that cure the disease. The Author does not say symptoms like those of scurvy were produced, but actual scurvy, pronounced so by all who saw the cases. Now, here certainly is the case of a disease cured by the very cause which produced it. What objection, therefore, is there from analogy, in cases of poisoning by arsenic or prussic acid, to repeat the dose. I will give a quotation from a tract now before me by Dr. Malan, and ask the reader, if cases are not here bound together by a most superficial likeness:—"Mercury cures various sorts of sore throats, because it produces similar symptoms when taken in health; the same is true of bark which cures ague, because it creates, when taken in health, symptoms similar to those of ague; true of ipecacuan, which cures vomiting; of coffee, which removes wakefulness; of rhubarb, which, as a purgative, is the best remedy against diarrhœa, and it is true of all other remedies without exception. In nature, also, no one brings a frost-bitten limb near the fire, but, on the reverse, applies snow to it. A scalded part is not cured by cold water, but by the careful application of warmth." Now, the author of these lines must know that, whatever superficial resemblances these cases bear to each other, they are really unlike; or if not, I ask him to throw away mere words, and state with rigorous exactness the *modus operandi* of the remedy in each of these cases, and see if they all accord. I will not trouble him now to show the uniformity of the doses in each, which would be an equally difficult task. Dr. Epps, too, and others, bring forward all the above instances on the same page. He also must show that they have a nearer resemblance to each other than his mere words convey. In lines following each other, this Author says, ipecacuan cures vomiting because it produces vomiting in health; but he does not say, when administered, whether its

the remarks made by the several speakers. We agree in the main with what fell from Mr. Cartwright, but we must set him right with respect to a question of fact. He stated that the National Association "is now reduced considerably by the separation of those who disapprove of a new incorporation." This is incorrect; the National Association did not lose 1 per cent. of its members upon the question of principle, and those who four years since seceded from it, originally joined it for the express purpose of sowing division in the ranks, and then withdrew in pretended indignation, with the hope of drawing others after them in their train. This artful scheme lamentably failed. The National Institute numbers fewer members than the old Association, simply because an annual subscription of one guinea is a condition of membership, and for no other reason. We trust that Mr. Cartwright, whom we have been wont to consider as a respectable man, is not about to adopt the meretricious arts of his leader for the purpose of giving false support to a declining cause.

THE COLLEGE OF SURGEONS AND THE PROPOSED NEW MEASURE.

The answer from the Council of the College of Surgeons to Sir George Grey is, in reality, a reply to the Report of the National Institute. The entire letter is composed of arguments intended to be refutations of the propositions set forth in the Report. The Council are placed upon their defence. The Minister has brought them into Court, and they are required to plead upon charges of breach of trust and neglect of duty before a jury of the Profession.

We do not deny that the Council's answer exhibits considerable talent for special pleading, and a great command of the art of mystification. If the Council have not the argument of truth, they can, at least, give to fallacies the appearance of its counterfeit. Talleyrand could not have exulted in apter pupils; for no men seem more thoroughly to comprehend and to know how to realize the axiom, that language was given to enable us to conceal our thoughts. There may be sense in many passages, but it lies latent, and is obscured behind a mass of verbiage. There is a possibility that, at some future period, the intelligence of the Council will burst forth with incomparable lustre; but at present we must be content to accept the darkness as the foreshadowing of the light we charitably conjecture that it conceals. There can be no doubt that the Council desired to accomplish a great effort when they set about their answer to the Minister. Their hasty meetings were not portents for nothing. Great men can receive a powerful momentum only from a great occasion; and when they are once in motion, the world waits with anxiety and awe the effects of their magnipotent intrusion. But alas! our hopes are often deflowered by disappointment, and we are taught to know, that the labours, even of great men, are limited by the possibilities of their undertaking. No genius could transmute hob-nails into ingots. It would be as difficult to convert errors into truths. Yet this the Council have attempted; and, if they have not succeeded, it is because their genius does not equal their presumption. They say—

"The Council need scarcely remark, in respect of the latter allegation, which is alone worthy of notice, that the education OF ALL who are preparing themselves for the Medical Profession, whether as *Physicians, Surgeons*, or General Practitioners, *IS and must be essentially the same in its objects and primary appliances.*"

Our readers will give us credit for not being wholly void of understanding, yet we are constrained to say that, on the assumption that this paragraph embodies a truth, we really cannot comprehend it. The *objects* of a Medical education are clear enough, but its *primary appliances* are a mystery. Pray, gentlemen, do you mean to assert, that the primary education in Greek and Latin of *all* who are *preparing* themselves for the Medical Profession is the same,—or do you mean to convey, that all students of Medicine, in its wider sense, are alike educated in *Medicine*, *Anatomy*, *Surgery*, and *Pharmacy*? We presume that the latter is your meaning; but we utterly deny its truth. That the education may be *nominally* the same in the majority of cases we might be inclined to admit; but that it *is essentially*, or practically the same, we deny. This sentence is one of those jesuitical ones, whose sense not being determined by the literal signification of the words, will receive any construction with which the reader or the writer may choose to invest it, and is, therefore, well calculated to deceive a person ignorant of the true state of our Profession. Whoever indited the sentence, either has not the faculty of thinking clearly, or is so fond of the grand style, that his feeble thoughts break down beneath it. What the Profession especially desires, as a want not yet fulfilled, is, "that the education of *all* who are preparing themselves for the Medical Profession, whether as *Physicians, Surgeons*, or *General Practitioners*, shall be essentially the same in its objects and primary appliances;" in other words, that the primary appliances, or courses of study, shall be the same for all candidates; and that the object—a thorough acquaintance with every branch of the Profession—shall be provided for Practitioners in all classes. We hope that we have succeeded in solving the College riddle.

Again, the Council say,—

"They hardly need observe, that those *selected* for public appointments as *Physicians and Surgeons of Hospitals*, or as teachers of the various branches of Medical Science, are such as *have distinguished themselves* by their proficiency in their several and peculiar departments of the healing art."

This is a remarkably modest testimony, made by the Council to their own merits; themselves being the Physicians and Surgeons of Hospitals who have so highly distinguished themselves in their several departments of the healing art! It is notorious, that such appointments have been hitherto but too generally made by a body of Governors utterly ignorant of Medicine and Surgery, but guided—often, indeed, misguided—by the personal influence of some Senior Medical officer of the Institution. Mr. Lane, for example, had highly distinguished himself in his peculiar department, but, though repeatedly a candidate, he was not selected for the Assistant-Surgeoncy of St. George's Hospital. Sir Astley Cooper was singularly fortunate in having a regiment of *distinguished* nephews, for whom he was anxious to provide places, and all of whom became Surgeons of Hospitals by his potential recommendation. It is said, that "Virtue is its own reward," but this dogma has for a long time been out of fashion at the College of Surgeons, who have more faith in fine writing than they have in fine principles.

The worst part, however, of this letter, is the repetition of the insulting language employed by the Council of the College in their first reply to the Committee of the National Association. They re-affirm that the General Practitioner should be educated only "for the *ordinary emergencies* of professional ministration;" forgetful that a man who is incompetent for the highest departments of surgery is disqualified for the lowest; for the chief part of the science of Surgery consists in the appliances necessary to prevent an ordinary emergency from becoming an extraordinary one; and forgetful that a General Practitioner is as liable to be called upon to afford surgical aid in an extraordinary emergency as the Members of the Council themselves. The Council complain, that they have been charged with "unworthy motives;" and, let us ask them, how sane men, enunciating sentiments of this preposterous description, could hope to obtain a character for honesty?

The Council clearly stand in awe of the National Institute. Impelled by that mysterious fascination which urges a terror-stricken bumpkin to follow a ghost, they pursue the Institute, sentence by sentence, and at last mumble an incantation, by which they hope to exorcise the dreadful apparition. This modern abracadabra consists in an earnest Petition to the Government to constitute Examining Boards out of the materials already possessed by the existing Colleges of Physicians and Surgeons,—somewhat in accordance with Sir James Graham's original plan,—with a further suggestion to associate, in some incomprehensible mode, the University of London with the two Colleges. It is not contemplated that the University shall examine candidates, but merely confer degrees upon the examinations of the Colleges. We have yet to see whether the University will consent to become mere hucksters in parchment. Again, the College say it would be wrong to educate the General Practitioner more highly than is necessary for "ordinary exigences;" and if the University enter into the proposed scheme, its degree must, of necessity, suffer depreciation as the exponent of a low standard of Professional attainment. Neither the Senate nor the Graduates would consent to this degradation.

The Council intimate nothing about admitting the Members to the enjoyment of their *elective rights* in the College, but they distinctly assert that General Practitioners shall not be admitted to the Council, and we tell them that until this object, or its equivalent, be attained, the agitation which has already shaken them with dismay will not cease. No arrangement will be accepted that does not embrace a full recognition of the *representative principle*.

We strongly recommend to the perusal of our readers the Report of the interview of the Deputation from the National Institute with Sir George Grey, printed in another column.

THE MEMORIAL OF THE SOCIETY OF APOTHECARIES.

We publish, this week, two documents of a remarkable character,—the Memorial from the Society of Apothecaries to Sir George Grey, and the Memorial of the Deputation from certain Provincial Associations. These documents are indeed singular—the first for its truthfulness and moderation; the second for its palpable misrepresentations and its unworthy spirit of intolerance. We have not at present time to review the latter paper at length, even if it deserved it; but, reading it in juxta-position with the Memorial from the Society of Apothecaries, we shall consider it merely in relation to what it states in reference to the Licentiates of the latter body.

The writers of this document say, in the altitude of their ignorance, that "mere Licentiates of the Apothecaries' Company *legally* are neither Physicians nor Surgeons." The truth is, that, except the Members of the College of Physicians, they are the *only legal* Practitioners in this country. Physicians and Surgeons they are not in name, though they are both in fact. The *mere* Surgeon has neither a Medical education nor qualification, although his practice is almost wholly medical, and he has no direct legal standing even under the College Charter. The Memorial also reports that they—the Licentiates—constitute "an insignificant minority;" "certainly not more than one in twenty." On the contrary, we believe that the proportion is about one in five,—this ratio being in accordance with a numerical estimate purposely made to ascertain the fact, and which we have seen. Again, the Memorial affirms that the Licentiates are excluded from the Army and Navy, prisons, Poor-law unions, hospitals, dispensaries, and Medical charities.

This is partly true and partly false. Not only they, but also Physicians and Surgeons with a single qualification are excluded from Poor-law unions; and with respect to the Army and Navy, the Medical Boards of these services have so low an opinion of the examination of the College of Surgeons, that they have instituted one of their own. With respect to dispensaries and Medical charities, the Memorial states an untruth.

We are profoundly grieved, for the sake of the dignity and honour of our Profession, that any section of our body should descend to such a pitiable exhibition of spleen and jealousy, and so disingenuously pervert truth with a view to promote party purposes. We have recently felt it to be our duty to expose so many mis-statements—not to say falsities,—emanating from this party, that for the future we shall not stand aghast at their most extravagant utterances.

These documents have come opportunely to remind us of our duty in respect to the Licentiates of the Apothecaries' Society. The affairs of the College of Surgeons have engrossed so much of our attention, that we have neglected to bring into due prominence the *medical* and *legal* interests of the General Practitioners of this country. We intend, next week, to bestow some attention on the Memorial of the Apothecaries' Society; and, in the meantime, we enjoin on all our brethren the observance of a generous and courteous spirit, such as becomes gentlemen, and to forbear to introduce a *war of classes* into our already distressed and disorganised Profession.

THE MEDICAL ETHICS (?) OF THE "LANCET."

In the last Number of the *British and Foreign Medico-Chirurgical Review*, there is a carefully written article on the "Relation of True Medicine to Empirical Systems." The Writer states his object to be, the determination of "the ethical relations of the true practitioner to the various forms of empiricism and quackery," with special reference to "the prevalent spirit of intolerance, which lead to consequences derogatory to the dignity, and injurious to the material interests, of the Profession." The better to attain this object, he passes in review the general characteristics of the leading systems of Quackery, and then compares them with those of Orthodox Physic; and he seeks for the peculiar characteristics of quackery in its literature, and especially in those publications which are acknowledged to be the exponents of the views held by the various tribes of quacks. The Homœopathic Quarterly and Weekly Journals, the "Zoist" and the "Hygeist," are selected for this purpose.

To determine what should be done with Quackery, and on what *principles* it should be met by the *Profession*, so as to be met *successfully*, the writer of this article consults two standard works on Medical Ethics, namely, the code of Ethics written by Dr. Percival, and the code of the American Medical Association; and then compares the doctrines laid down therein with the results of the comparison which he institutes between the empirical and legitimate arts of healing. He has evidently done all this with the sole object of adding to the dignity and usefulness of our body; and, however we may be disposed to differ with him on matters of detail, we cannot but allow him to be a most determined opponent of quackery in every form, and an ardent supporter of what is most elevated and honourable in our Profession.

Such are the bare facts touching the article in the *British and Foreign Medical Quarterly*. Let us now turn the attention of our readers from this ably-conducted Review to a leading article in the *Lancet* of April 27th last, in which the article we have referred to is commented on in that style of criticism which is peculiar to the *Lancet* amongst Medical Journals, and which is confined to the lowest of the periodicals devoted to general literature or politics. The title of the leader on the cover of the *Lancet*, is, "The *British and Foreign Medical Review*, and its unblushing Support of Quackery;" and in the first paragraph we find the following assertion:—"The first part of the article is positively devoted to a serious criticism of homœopathy, hydropathy, mesmerism, and Morrison's pills!" We can positively assert, that this is an "unblushing" falsehood—neither more nor less. The writer, we further assert, must know well, that the quack-publications noticed as heading the article, are mentioned because they enable the writer of the essay in the *Quarterly* to demonstrate the false principles, the ignorance, the credulity, the hatred to legitimate Medicine, of the whole herd of quacks, including the homœopathic; and to expose their stupid and ignorant advocacy of specifics, their unscientific and dangerous reliance on mere experience, their cunning appeal to the weak points of human nature, their trusting credulity, and the polemical bitterness and unmitigated hostility which they display towards the dignified, nay, Divine art of healing. Hahnemann is placed on a level with Morrison; the *Zoist* with the *Hygeist*; yet the Editor of the *Lancet* has the audacity so to practise on the gullibility and credulity of his readers, as to assert and re-assert, that the article is an "unblushing support of quackery," a "pro-quackery production!" We fearlessly affirm, that a greater insult was never offered to the Medical Profession than is contained in this Leader of the *Lancet*; for to suppose for a moment that such wilful perversions as it contains, and such low, vulgar views as it advocates, will be approved by a body of scholars and gentlemen, is, indeed, to offer them an unpardonable affront.

We will notice one or two particular instances of reckless perversion, especially as the points mooted are of considerable importance. The writer in the *Quarterly Medical Review* deprecates all those methods of putting down quackery which imply punitive repression, or the direct interference of the Profession; firstly, because they are totally inefficacious; secondly, because the attempts made to carry them out have done more to encourage quackery than any efforts of the quacks themselves. As to the first point, we have had ample experience in this country. Even some of our highest Judges have construed the law in favour of the quack, and have thought it right to assert the freedom of the subject, and to protect him against what they think mere selfish and interested prosecution. Nor, in Continental states, has the repression of quackery by the civil arm been more successful; for the strictness of the law itself, and its resolute application, have led to the public recognition of quackery, as we find to be the case in Germany, where homœopathy and hydropathy have the full sanction of the Government. It is with such glaring and obvious proofs of the utter inefficacy of physical force, that the writer in the *Quarterly* recommends the instruction of the public mind, and the influence of moral force in its stead. The Editor of the *Lancet* wilfully perverts this view, observing, "according to the *Quarterly*, there must be *no attempt whatever* to put down quackery. Legitimate medicine must stand with her arms pinioned and eyes blindfolded, while the quack pursues his murderous calling unmolested. He is on no account to be interfered with, forsooth, by the orthodox medical man, *whatever his crimes against society* or the laws of his country." This is all simply untrue; the writer in the *Quarterly* repudiates all *persecution* and *abuse* of the quack by the orthodox practitioner; all such vulgar scolding as the *Lancet* indulges in; all interference with freedom of opinion. He would have the Profession to crush its enemies by the weight of its own truthfulness and grandeur, and not by trashy tirades such as the *Lancet* publishes. He deprecates all

vulgar persecution and abuse of quacks, because, says the Reviewer, "The slightest persecution or vilification has been skilfully transmuted into a crown of martyrdom; and they have stood before the public as the patient, enduring champions of truth or of political freedom, and the victims of a professional rancour, excited solely by a regard for pecuniary interests." He urges that the best way to cause the quack to sink into merited neglect, is *to state the truth plainly in society generally*, with a total absence of all vilification and abuse, and that thus SOCIETY *will be induced to protect* ITSELF from them as from "other nuisances." In short, he maintains that *the judgment* of the lay public must be convinced, if we would effectually suppress quackery. All this the *Lancet* ignores; and, having omitted an entire sentence from a passage quoted from the *Quarterly*, that he may the more effectually deceive his readers and pervert the writer's meaning, he then, in a characteristic strain of bombast and mock indignation, denounces views which no man in his senses entertains.

The *Quarterly* further objects that the claim of protection for their pecuniary interests, made by the Profession, as against the rivalry of Quacks, has, in fact, no foundation in truth; so that while it affords so powerful a defensive position to the quack, it only weakens the Profession. He maintains that the injury done by quacks to the health of the people really advances the pecuniary interests of the Medical Practitioner, and that consequently "*this is the true and the most powerful argument for secular interference.*" The *Lancet* observes on this passage, "We say advisedly that we have never seen a passage in any Medical writing of such slanderous and venomous insinuation against the morality and good faith of the Medical Profession. It is merely a vile appeal to dishonesty, and a connivance at crime, on the miserable plea of self-interest. Such, be it known to all men, is the profession of faith of the *British and Foreign Medico-Chirurgical Review!*"

The writer in the *Quarterly* discusses the question of professional intercourse with regularly educated empirics, and adopts that article of the American code which maintains "that no one can be considered as a regular Practitioner, *or a fit associate in consultation*, whose practice is based on an exclusive dogma, to the rejection of the accumulated experience of the Profession," &c. Coinciding in this article of Medical Ethics, the *Quarterly* observes, "we subjoin no comments, as our delineation of the peculiar characteristics of Medical heresies and quackeries *perfectly accords* with this article. It is of more importance that the Profession *should carry out the sentence of excommunication in* EVERY *case*, so that it shall not be made to appear as a persecution or proscription of *opinions*, rather than a punishment of unprofessional conduct."

But, although the writer in the *Quarterly* advises that the empiric should not be met in consultation, yet, whenever the patient is obstinately bent on having one of the class called in, he adopts a recommendation given by Percival, namely, to continue to visit the patient, although not in co-operation with the quack, with the double object of protecting the patient's life, if endangered by the empiric, and of watching the progress of the case. The propriety of the advice may be questioned; but who excepting the Editor of the *Lancet* could speak of it thus:—"We should prefer to call things by their right names, and say that the Practitioner who did so was *particeps criminis*, an accessory before the fact; and we should think him, indeed, worse than the quack himself." According to the *Lancet*-code of ethics, the regular Practitioner is bound to leave his patient *entirely* to the tender mercies of the quack, without even the chance of saving him by well-timed interference.

It is no business of ours to defend the *British and Foreign Medico-Chirurgical Review;* but, as Journalists, we owe a duty to the Profession, and have, therefore, to consider what will be the effect on professional interests of this style of writing in the *Lancet*. What will the Grosvenors, the Ducies, the Bulwers,—what will that portion of the aristocratic and educated classes of the community who take an interest in Medicine, think of the professional character and conduct as represented in the *Lancet?* They must come to one of two conclusions—namely, either that the leading Medical Quarterly Journal is an avowed and ardent supporter of quackery; or, that the Profession at large sanctions and maintains in circulation a weekly Journal, which does not hesitate, for some purpose best known to itself, wickedly to pervert the arguments against quackery adduced by the *Quarterly*, and, as much as in it lies, destroy their force. Either conclusion must of necessity inflict a deep wound on the dignity and moral power of the Profession. Now, that the earnest desire of the writer of the article on which this attack has been made, is to point out the most effectual as well as the most dignified method of repressing Quackery, must be evident enough to any one who may even glance at it; there is, therefore, but one alternative,—namely, that it is the *Lancet* which has inflicted such a wound, by the publication of the detestable leader we have referred to. Nor is this all. The numerous tribes of quacks, with whom *mala fides* is the ruling principle, need only be truthful for once, and re-publishing that leader, circulate it with their accustomed assiduity throughout the length and breadth of the land, to be able to demonstrate that the leading Quarterly Journal of the Empire is with them, and, at the same time, to afford an undoubted specimen of the style controversial approved by the Profession at large. *This heavy blow and great discouragement*—THIS FEARFUL MISREPRESENTATION OF ITS LITERATURE, ITS DOCTRINES, AND ITS TEACHER—THIS GROSS OUTRAGE ON ITS MORAL DIGNITY, *the Profession will owe to the* LANCET.

THE RETIREMENT OF MR. ARNOTT FROM UNIVERSITY COLLEGE.

IT is with much regret that we have to inform our readers of the fact of Mr. Arnott's resignation of the Chair of Surgery in University College being accepted by the Council. As well-wishers to the school we could not have desired any change in the Medical Staff at present. We rejoice, however, to find that Mr. Arnott's retirement has been prompted by no feeling of dissatisfaction with the conduct of the Students, nor by any diminution of the cordial interest which has always existed between his colleagues and himself. With the Students he has been most popular, and his retirement is universally, and, we may say, very properly regretted by them; with the other Professors he has always been on the most friendly terms. Insinuations have been made by a Medical periodical, which has distinguished itself by its hostility to University College and every one connected with it, that Mr. Arnott has resigned in disgust, or has been driven from the place by intrigues. We have been informed, however, on the best authority, that Mr. Arnott's reason for retirement was simply the impossibility of finding time for the proper performance of the duties which attached to his chair. These duties were more onerous and heavy than he expected to find them, and required more thought and attention than accorded with the adequate performance of his other professional engagements. The resignation was determined upon some months back, before any squabbles had arisen between the Students and the Council, and was only forwarded to the Council at this time because Mr. Arnott considered that the close of the winter session was the latest period which, with justice to the Council, he could select. We think it right to say, however, that Mr. Arnott has always objected to the organization of the College, believing that there is a fundamental error in the practical distance which separates the governing body, the Council, from the administrative body, the Professors. We believe he is right in this opinion, and we trust that the late disputes (now passed, not, we hope, to return) will convince both Council and Professors, that without cordial co-operation and mutual assistance, their great Medical School, although apparently raised, by the talents of its teachers, to the highest point of prosperity, is yet never secure from those internal shocks which must inevitably spring from an inherent fault of organization.

ANSWER OF THE COUNCIL OF THE ROYAL COLLEGE OF SURGEONS TO SIR GEORGE GREY.

TO THE RIGHT HONOURABLE SIR GEORGE GREY, BART., HER MAJESTY'S PRINCIPAL SECRETARY OF STATE FOR THE HOME DEPARTMENT, &c., &c., &c.

SIR,—In compliance with the desire expressed in your communication of the 2nd ult., the Council of the Royal College of Surgeons of England, after a careful consideration of the latter paragraphs of the letter of Sir James Graham, dated the 23d March, 1846, "with respect to the principle on which the election into the Council was regulated," to which you specially directed their attention, submit to you such alterations in the constitution of the College as they deem desirable, provided you see fit to advise Her Majesty to empower the Council to nominate an additional number of Fellows, in accordance with the Resolution of the 4th of February last, which the President had the honour of presenting to you. At the same time, they beg to state unequivocally, that any communications which may have been laid before you, except the Resolution in question, are entirely unauthorised by the Council.

Before adverting to the alterations which they propose in the Charter, the Council of the College respectfully remind you, that it was at the instance of your predecessor in office they voluntarily surrendered powers granted by their former Charter,

with the full understanding that the Charter which they received, with its fundamental changes in the constitution of the College, was an integral part of the measure for regulating the whole Profession, which was embodied in Sir James Graham's first Bill of August, 1844. They do not complain of the abandonment of that Bill;—though they may be allowed to express their regret that they were thereby deprived of the protection, offered by the proposed legislative measure, against attacks caused mainly by the reformed Charter which they had been induced to accept. But having willingly submitted to all the reforms which Her Majesty's Secretary of State for the Home Department deemed requisite and sufficient for the benefit of the Profession and the public, they trust that the claims of the College, as the sole legally authorised Institution in England for the promotion of scientific Surgery and for the examination of Surgeons,—claims which have been recognised in all preceding Charters, and which they are at all times prepared to substantiate as conducive to the public interests,—will not now be overlooked nor forgotten by Her Majesty's Government.

The Council of the College have reason to believe that the alterations in subsequent Bills, calculated to affect injuriously the interests and usefulness of the existing Colleges, were adopted at the instance of an Association of Medical Practitioners, calling themselves the National Institute, who, assuming to be the representatives of the General Practitioners or Surgeon-Apothecaries throughout England, demanded the institution of a College of General Practitioners, and claimed for this new College the unrestricted right of regulating the education, and of testing the qualifications of candidates for their Diploma in all branches of medical science, Surgery included.

Against the establishment of a College, which would be in truth a rival College of Surgeons, the Council, in a Statement, dated the 5th of June, 1845, addressed to Her Majesty's Secretary of State for the Home Department, respectfully protested. They said: "The Council of this College do not object to the incorporation of General Practitioners, if it should be found necessary in order to fulfil purposes of public utility, which cannot be accomplished by the two existing Colleges; but they protest solemnly against such incorporation in a form which, in assuming a name and powers to which it has no legitimate claim, invades and annuls functions vested in the College of Surgeons." And they observe:—"In conclusion, the Council, appealing to the estimation in which the Diploma is held, and the high character which English Surgery has attained, in proof that the rights and privileges conferred on the College by Royal Charter have been faithfully employed for the intended purpose of advancing the science of Surgery, hope and trust that the services and claims of the Institution will be fully considered before any legislative measure shall be adopted for the regulation of the Medical Profession; that no new Institution will be authorised to assume a name implying functions hitherto entrusted to this College, nor be empowered to interfere with or supersede it in its legitimate province of testing the qualifications of Surgeons, and conferring on them the legal authority to practise Surgery."

But the Council cannot doubt, on referring to the published declarations of the Council of the National Institute, that a necessity for the proposed College was urged—on the plea of the existence of unworthy motives on the part of the Colleges of Physicians and Surgeons to lower the standing and education of those engaged in general practice. It is alleged by them, that those engaged in the practice of all the branches of the medical art are necessarily better informed on each and all than those who devote themselves especially to the study and practice of Medicine, or Surgery, or Midwifery, or Pharmacy; but that, in order to secure the amount of education required, and the implied rightful supremacy of General Practitioners in connexion with it, the establishment of an appropriate or independent College is indispensable.

The Council need scarcely remark, in respect of the latter allegation, which is alone worthy of notice, that the education of all who are preparing themselves for the Medical Profession, whether as Physicians, Surgeons, or General Practitioners, is, and must be, essentially the same in its objects and primary appliances; and that the differences in the attainments and qualifications of individuals cannot but depend upon the differences of mental abilities, and of the amount of time and labour devoted to the whole course, or to special parts, of professional study. They hardly need observe, that those selected for public appointments as Physicians and Surgeons of Hospitals, or as teachers of the various branches of medical science, are such as have distinguished themselves by their proficiency in their several and peculiar departments of the healing art; and that wherever, as in the metropolis or other large towns, the requisite conditions are present, the primary and immature state of the Profession, represented by general practice, is superseded more or less by the distinctions of Physician, Surgeon, Obstetrician, and Pharmaceutist, without, however, violating the obligation which, consisting in the recognition of the same fundamental principles, maintains the common professional unity of all. The Council have no hesitation in adding, as the result of their long experience, that, in the qualifications of their Members, as destined for general practice, they dare not require any higher standard of surgical education than is compatible, on the one hand, with the needs and safety of the public, and, on the other, with the length and consequent expense of a course of study, which may be proportionate to the scale of remuneration of the majority of General Practitioners; and they believe that the infallible consequence of raising unduly the standard of education would be practically the evasion of any qualification, and the surrender of the poorer classes, under any surgical emergency, into the hands of the venders of drugs and other uneducated persons.

The Council of the College further desire to impress on the attention of Her Majesty's Secretary of State for the Home Department, that in connexion with the grant of their late Charter, which was mainly intended to provide a constituency for the election of the Council, they obtained the sanction of Her Majesty's Government to a plan, which they had long contemplated and cherished, of improving the education and qualifications of surgeons. By the provisions of that Charter they were enabled to institute a class of Fellows of the Royal College of Surgeons of England, who are thereby authorised to be the electors of the Council, and become entitled to that distinction by proofs of a liberal general education, of a longer course of study, and of a larger amount of professional knowledge, practical and scientific, than the College could venture to require of those who had hitherto sought the diploma as members. It would be out of place for the Council to enter into details, especially as they may refer for further explanation to the statement dated May 25th, 1844, relating to the Charter of 1843, and to its operation, immediate and prospective. But the Council may be permitted to affirm that the possession of the name and privileges of a Fellow is limited—by no other conditions or restrictions than those of moral character, of high education, and of superior professional attainments, and that he is in no respect prohibited from general practice, or from being in any and every sense of the word a General Practitioner. The object of the Council of the College of Surgeons was that of improving the education and qualifications of all Surgeons and of General Practitioners, as Surgeons, inclusively; and instead of showing any disposition to lower the standard of education of General Practitioners, they have actually and undeniably provided the means of raising that standard, and have put within the reach of all General Practitioners the means of placing themselves on an equality with those who practise surgery as their especial vocation or claim to distinction. At the same time the Council venture to point out and to recommend to the notice of Her Majesty's Government, that the design of depressing the class of General Practitioners, with which the Council of the College of Surgeons have been charged by the Council of the National Institute, cannot fail to be carried into effect by the establishment of a College of General Practitioners, proposed by the latter Council; for should this new College institute a standard of education equal to that required by the Colleges of Physicians and Surgeons for their Fellowship, the General Practitioner will disappear before the Druggist and Chemist, who will be necessary to supply his place among the poorer classes; and should it adopt a qualification, such as the needs of society imperatively demand, suited to the wants and means of the majority of the people, and calculated for the ordinary emergencies of professional ministration, the proposed College, in being exclusively that of the General Practitioners, would exclude them, as a separate and lower class, for ever from the rest of the Profession. The desire of the Council of the College of Surgeons is to render the admission to their College the proof, as far as possible, of the character of a competent Surgeon; but at the same time to make that admission, in every case where the circumstances of the member permit it, the grade or step to the Fellowship, and, it may be, to the highest honours of the College.

It has been, therefore, with feelings of sincere and unmitigated regret, that the Council find their motives in instituting the Fellowship have been misconstrued, and that their design of elevating thereby the character of Surgeons has called forth a spirit of opposition and hostility to the College, which the explanations offered to its members do not appear to have extinguished or softened in the minds of some of the General Practitioners, who were not included in the lists of nominated Fellows. The Council, however, notwithstanding the injustice of the charges with which they have been assailed, and the delay which will be occasioned in the development of their plan, are unwilling that any sense of wrong should continue to alienate any portion of their Members, and not less that it should prove a bar or impediment to a comprehensive legislative measure, of which the urgent need is universally acknowledged, for the regulation of the whole Profession of Physic and Surgery, and for the settlement of questions bearing on the interests of the Profession and of the public, of far more importance than the titles and designations which are to be borne by Practitioners in Surgery. And in proof of what they advance, they need only advert to the provisions, contemplated in any enactment of the Legislature, for the superintendence of the Profession by a supreme Board or Council, for ensuring thereby a high and uniform qualification throughout the Empire, for regulating the reciprocity of practice in the three Kingdoms, for the authorised registration and public notification of all qualified Practitioners, and for securing the public against the pretensions and malpractices of uneducated and dishonest persons. With the sincere desire, then, of healing all differences, the Council have had the honour of submitting to you their resolution of the 4th of February last, with the earnest prayer, that they may be forthwith empowered to nominate to the Fellowship without examination, and under the conditions only of the prescribed Certificate, those who, having been Members of the College at the date of the Charter of her present Majesty, now are, or when they shall be, Members of twenty years' standing.

In compliance with your wishes, the Council have deliberately considered the alterations in the Charter and bye-laws which they deem requisite or desirable, provided the powers for which they have applied should be granted by Her Majesty's Government; and they have the honour to transmit to you the accompanying document, in which such alterations are specified and set forth. It will be seen, that in the provisions for the contemplated revision of the Charter, the mode of election into the Council, proposed by Sir James Graham on the 23rd of March, 1846, and designed to secure a succession of the ablest Councillors, holds a prominent place; and it will not be unnoticed, that the ineligibility of Practitioners in Midwifery to seats in the Council has been removed, and that electors whose residence is at a distance, or whose engagements prevent their attendance, may vote by transmitting papers to the College.

But the Council feel, that they would have incompletely complied with the instructions conveyed in your letter of the 2nd of March, had not they considered the proposed "alterations of the constitution of the Royal College of Surgeons in relation to the Medical Profession generally," and in connexion with the contemplated Act of Parliament for the better regulation of Medical Practice throughout the United Kingdom. They regret that the Conference, held under your sanction at the College of Physicians, terminated their labours without any satisfactory solution of the grave questions, the consideration of which had been entrusted to them; though this undesirable result could not but have been foreseen throughout the negotiations, since it depended upon the recurring difficulty, if not impossibility, of providing for the claim that the proposed College of General Practitioners should be inclusively what the College of Surgeons already is, namely, the Institution by Royal Charter for the promotion of scientific Surgery, and the legally recognized authority for regulating the education and testifying the qualifications of Surgeons. The Council, then, are fully convinced that, if the proposed College of General Practitioners is intended to act in concert with the existing Institutions, the establishment of such College is impracticable. They have also strong reason to believe that any such new Corporation would be distasteful to the majority of that part of the Profession, of which it is proposed to be the representative and head; and they can assert with confidence that the dignity and interests of the Profession, and of the General Practitioners inclusively, would be better consulted by entrusting its contemplated functions to the College of Physicians. They willingly acknowledge the zeal and industry which the Society of Apothecaries have shown in executing the task imposed upon them by

the Act of 1815; but they believe they are only stating the opinion of the General Practitioners, when they say that the control of the Medical education, and the examination of members of a Profession, would more fitly devolve on the College of Physicians than on a trading company. It is true, indeed, that a desire has been expressed on the part of some of the General Practitioners that the College of Surgeons should assume the place and functions of the proposed College of General Practitioners, or, in failure of this design, that a new and independent College of Medicine and Surgery should be established; but the Council, in their answer of the 5th of February last to the Council of the National Institute, deemed it their duty to express their opinion of these proposals in the following manner:—"They believe that the College (of Surgeons) would then cease to be regarded as the Institution especially designed for the promotion of scientific Surgery; and that by admitting to the Council others than those, who, as Surgeons of hospitals, teachers, eminent Practitioners, or original inquirers, in surgery, maintain its scientific character, the Diploma of the College would lose the high estimation which has hitherto induced those preparing themselves for general practice to seek it *voluntarily* as the best guarantee of their surgical qualifications and professional character. They cannot, therefore, consistently with the object for which the College of Surgeons was instituted, consent to any proposal for introducing into the Council those who practise pharmacy. The Council of the College are no less adverse to the proposal of instituting a 'National College of Medicine and Surgery,' intended more or less to supersede the Colleges of Physicians and Surgeons, and the Society of Apothecaries. They are convinced that the proposal of the Chairman of the Associated Surgeons, viz.,—'That the new College must be independent of all others, and must possess the right of granting diplomas in Medicine and Surgery, which shall entitle the holders to practise in all the departments of Medical and Surgical science, and to fill all Government and public appointments,'—tends inevitably to abolish those distinctions which have been hitherto beneficially recognized as marking the relative claims of Medical Practitioners to the confidence of the public, and which, by preserving the highest standard of education in those who have the means of attaining it, maintain and elevate the character of the whole Profession. And they especially hold that it would most injuriously affect the interests of every one calling himself a Medical Practitioner to diminish the authority or contract the influence of the College of Physicians, seeing that the general character and respectability of the Profession not only depends greatly upon the character of those who are distinguished members of it, but that the Fellows of the College of Physicians have ever been distinguished by the same education and training as the gentry of the country, by their learning and attainments in literature, by the aid which they have given to the progress of science, and by their association with the learned and scientific bodies of the Metropolis."

Impressed with these convictions, and supported by the express desire of many, that the College of Physicians should undertake the duty of testing the Medical qualifications of those about to be engaged in general practice, the Council lost no time in conferring with the authorities of the College of Physicians on this important subject, and they have the satisfaction of stating that the College of Physicians, without a dissenting voice, have acceded to the proposal. The Council, then, cannot entertain a doubt that, probably under similar arrangements to those of Sir James Graham's Bill of 1844, no difficulty will be found in instituting Boards for examination in Anatomy and Surgery, and in Medicine, Midwifery, and Pharmacy, such as cannot fail to obtain the concurrence and support of all well-informed General Practitioners, and of those who seek the license for General Practice. And when it is considered that the College of Physicians, no less than the College of Surgeons, offers facilities to all who have passed their examinations for rising into the higher grades, which are distinguished in each College only by higher education and proficiency, it will be felt that the distinctions are anything but invidious, and that no intention can exist of maintaining exclusive classes in a Profession which, requiring the grades and distinctions that mark the relative qualifications of its members, no less demands a common bond of professional unity.

The Council of the College believe, however, after a careful consideration of the various plans suggested during the late years of Medical agitation, that the reform and organization of the Profession in England would be best completed by an amicable alliance and union of the Colleges with the Universities. They believe especially that the Colleges of Physicians and Surgeons might advantageously co-operate with the University of London; and that as, on the one hand, the Colleges, in accordance with their peculiar objects and ordinary functions, possess and could always supply most efficient provisions for examinations in Medicine and Surgery, practical and scientific; so, on the other hand, the academic degrees of the Universities, when conferred upon such examinations, might be safely combined with the license to practise without further examination.

In carrying out this scheme, intended for the reciprocal advantage of the Universities and Colleges, and for the benefit of candidates for admission to the Medical Profession, the Council would see no reason to alter the professional distinctions recognized in Sir James Graham's Bill of 1844, of Physicians, Surgeons, and Licentiates in Medicine, Surgery, and Midwifery. But these distinctions are not designed to have anything exclusive in their character. In placing the qualifications of the whole Profession under the conditions of University education and of academic degrees, it would be obligatory on all to pass through the same probationary gradations and examinations: and though it could not be avoided that some, or the majority, would be under the necessity of commencing their professional career under the least distinguished designation, these even could not but feel that they had entered with all other aspirants at *one and the same professional portal*, and might at any future time, under favouring circumstances and more ambitious views, raise themselves into a higher professional grade. And thus there would be provided for those who occupy a less fortunate position in the Profession, a sustaining ground of hope, and that elevating sense of union with their more distinguished brethren, which is calculated to foster self-respect; whilst those distinctions would be preserved which are necessary to elicit individual excellence and to secure the highest proficiency in the Profession collectively.

Finally, the Council of the College of Surgeons beseech Her Majesty's Government—in considering the public services of a Profession, whose rewards are wholly disproportioned to their indefatigable labour, their hourly danger, and their unwearying zeal—to rescue the Medical Profession, by the exertion of the influence of Her Majesty's Government with the Legislature of the country, from the serious evils of protracted agitation.

(By order of the Council)
JOSEPH HENRY GREEN, President.
JAMES MONCRIEFF ARNOTT, } Vice-Presidents.
JOHN FLINT SOUTH, }
Royal College of Surgeons of England,
April 23, 1850.

MEMORIAL

FROM THE SOCIETY OF APOTHECARIES TO THE RIGHT HONOURABLE SIR GEORGE GREY, BART., HER MAJESTY'S PRINCIPAL SECRETARY OF STATE FOR THE HOME DEPARTMENT.

To the Right Honourable Sir George Grey, Bart., Her Majesty's Principal Secretary of State for the Home Department.

The Memorial of the Master Wardens and Society of the Art and Mystery of Apothecaries of the City of London,

Showeth,—That the Society of Apothecaries were entrusted by the Legislature in the year 1815 with the duty of regulating the course of study, and deciding upon the qualifications, of all who should thereafter propose to engage in that branch of Medical practice.

That the Society do not hesitate to affirm, that they and their predecessors have discharged that duty, for a period of five-and-thirty years, zealously and faithfully, and, as they confidently believe, with advantage to the public.

That they have laboured incessantly to render the Medical Attendant of the great mass of the people of this country thoroughly competent to the discharge of the important duties which devolve upon him; and they have striven, to the extent of their powers, to elevate the professional and social status of the large body of Practitioners who have been educated under their auspices.

That the Society have been long sensible of the necessity which exists for a revision of the laws affecting the Medical Profession generally; and they have omitted no fitting opportunity of representing to the Government the changes which are required in the Act of Parliament under which the functions of this Society are exercised.

That they have aided, to the best of their ability, the efforts which have been made of late years to render the Medical Institutions of this country better adapted for the discharge of their respective functions.

That, irrespectively of all personal considerations, and with a single desire to promote any arrangement which gave reasonable promise of an improvement in the Medical polity of the country; and in the hope that an incorporation of the General Practitioners in Medicine, Surgery, and Midwifery, possessing an unrestricted right of examination in every branch of professional knowledge, would result in such an improvement; and in the belief that such an Incorporation was, in fact, desired by a large proportion of the General Practitioners themselves, the Society consented to relinquish the performance of the duties in which they had been so long engaged.

That the Conferences which took place between the Government and the various Medical authorities in the years 1845 and 1846, in which the Society lent their willing and active co-operation, having failed of effect, the Society were themselves the first to propose the Conference of the Medical Corporations, to which Delegates from the National Association of General Practitioners were afterwards admitted, upon the suggestion of the Secretary of State; that at the frequent meetings of the Conference thus constituted, the Delegates from the Society of Apothecaries, in conjunction with the other members of the Conference, zealously laboured to effect such an arrangement as might prove generally acceptable to the Medical Profession, and might secure the sanction of the Government and the Legislature; and the Society have seen the unsuccessful termination of the labours of that Conference with unfeigned regret.

That although the Society, under the circumstances which have been stated, consented to relinquish the duties which were entrusted to them by the Act of 1815, they are anxious not to be understood as regarding the performance of those duties as onerous or distasteful; on the contrary, they have ever regarded the trust confided to them by the Legislature as of the most honourable character; they look back upon the public good which they have been enabled to effect with the highest feelings of pride and satisfaction; and they will never voluntarily relinquish the performance of their duties but under the strongest conviction that the public will be benefited by the change in the law which would transfer those duties to other hands.

That the Society would not have intruded the expression of their feelings upon the Secretary of State at the present moment, if an impression had not gone forth that the Society were willing to be relieved from the labours imposed upon them by the Act of 1815, and if they had not thought that their silence might give some sanction to such an impression.

That the Society have, during the agitation, and, unhappily, the dissensions to which the discussion of the question of Medical Reform has given rise, steadily persevered in carrying out the objects of the Legislature, by improving the curriculum of study, and raising the standard of qualification of those who seek their Certificate, and they will continue to do so as long as they retain the confidence of the Legislature; and the Society refer with the utmost satisfaction to the evidence given before successive Committees of the House of Commons on Medical affairs, and to the concurrent testimony of members of all branches of the Profession, as to the result which has attended the Society's administration of the Apothecaries' Act.

That the Society are, from their experience of the actual working of the law, fully sensible of its defects; that they are, as they have ever been, anxious to remedy those defects; and are prepared to lay before the Secretary of State such suggestions for the amendment of the Act as would, in their opinion, go far to remove the objections which exist to its provisions, and would, at least, remove many of the impediments in the way of a satisfactory settlement of the complicated question of Medical Reform, not only as regards England and Wales, but the Kingdom at large. On behalf of the Society,

J. B. EYLES, Master.

MEDICAL REFORM.

To the Right Honourable Sir George Grey, Baronet, Her Majesty's Principal Secretary of State for the Home Department,

The Memorial of the undersigned members of the Medical Profession, residing and practising at and in the neighbourhood of Reigate,

Showeth,—That the circumstances attending the

present uneasy and unsettled state of the Medical Profession having been repeatedly offered to the serious attention of Her Majesty's Government, your memorialists will content themselves, on this occasion, with submitting, in concise terms, the following considerations, founded on facts.

That a vast majority of the Profession, the General Practitioners, from the absence of any bond of union, or any legally authorised executive to represent them, have, for many years past, been placed in a position of the greatest embarrassment and humiliation. That, owing to this radical defect, and the want of any sufficiently influencing power with the executives of the existing Medical incorporations, they have hitherto been unable to obtain a recognition of their claims to corporate rights and privileges, or protection from illegal and unprofessional practice,—privileges which they believe to be essential to the public welfare, as well as to the good of the Profession.

Your memorialists, therefore, most respectfully request, that Her Majesty may be advised forthwith to grant a Royal Charter for the foundation of a new and independent Royal College, incorporating, in the first instance, those individuals at present practising as Practitioners of Medicine, Surgery, and Midwifery, with a representative government, and equal rights and privileges for all its members, giving authority to regulate the education, and to test by examination in every branch of medicine and surgery all future candidates for its membership.

And, furthermore, that Her Majesty's Government may be induced to frame and carry through Parliament, with as little delay as possible, a Medical Reform Bill, containing provisions calculated to give effect to the new incorporation of those engaged in the general practice of medicine, surgery, and midwifery throughout the country.

JOHN STEELE, Surgeon, &c
PETER MARTIN.
EDWARD BOULGER, Bletchingley.
WILLIAM HEN. SARGANT, Bletchingley.
WILLIAM THOS. SARGANT.
THOMAS SMITH, Crawley.
ANDREW SISSON, Surgeon.
HENRY HARRIS.
THOMAS MARTIN.

MEDICAL REFORM.

A Deputation, consisting of Mr. Watson Beever and Mr. Noble, of Manchester; Mr. Southam, Salford; Mr. Tomkin, Witham; Mr. Samuel Philbrick and Mr. Nunn, Colchester; Dr. Henry Johnson, Mr. Arrosmith, and Mr. W. Clement, Shrewsbury; Mr. Peploe Cartwright, Oswestry; Mr. W. P. Brookes, Wenlock; Dr. Lloyd Williams, North Wales; Dr. Reyner, Stockport; Dr. Hastings, President, and Mr. Sheppard, Hon. Secretary, of the Provincial Medical and Surgical Association; and Mr. George Bottomley, of the Associated Surgeons of England,—waited upon Sir G. Grey, on Thursday, the 2nd inst., accompanied by Mr. Brotherton, M.P.; Mr. Ricardo, M.P.; Mr. Wakley, M.P.; Mr. Baldock, M.P.; Mr. Foley, M.P.; Lord John Manners, M.P.; Colonel Beresford, M.P.; Sir J. Tyrell, M.P.; Mr. Hardcastle, M.P.; Mr. Bramston, M.P.; Mr. Rufford, M.P.; and Mr. Gibson, M.P.

The Deputation having been introduced,

Mr. Cartwright, of Oswestry, stated, that he had the honour to submit to Sir G. Grey's consideration certain propositions, emanating from the Combined Deputation of Provincial Physicians and Surgeons. This deputation expressed the sentiments of the surgeons of Manchester, of Stockport, of Essex, of Salop, and North Wales, and, in the person of the talented President of the Provincial Medical and Surgical Association, the sentiments of the Central Council and branches of that large Association. The propositions were identical with the Memorial which he had had the honour to forward in June, 1849, signed in a few days by about 500 legally qualified provincial physicians and surgeons resident in Shropshire and adjacent counties. The propositions were also identical with a Memorial presented to Sir G. Grey last June, signed by 160 surgeons of Manchester and its neighbourhood, and with another Memorial recently presented from Essex, signed by upwards of 100 provincial surgeons, and were identical also in the most essential points with a Memorial that would to-day be presented from the Provincial Medical and Surgical Association, which mustered nearly 2,000 members. It was necessary to mention this, to show that this Deputation represented a large body of provincial surgeons, in contradistinction to what had been stated by the meeting of the National Institute, that they were the representatives of the General Practitioners of the kingdom. The National Association, of which they are the remnants, numbered a large body of members, but is now reduced considerably by the separation of those who disapprove of a new corporation. Provincial surgeons are placed in circumstances occasionally of great exigency, and it is imperative, therefore, that they should be properly and sufficiently educated; and they can have no guarantee that such will be the case, unless surgeons in general practice are admitted in part to the governing council of the College to which they belong, so as to afford them the means of superintending the education of their class. The provincial surgeons do not seek the emoluments and offices of a new College; they are desirous that the Government should alter and amend existing Institutions, as suggested in their propositions. Having read the first proposition, Mr. Cartwright submitted that there was much that was valuable and honourable in the ancient Colleges, and the Deputation regretted that any body of their professional brethren should seek to alienate themselves from them; it would be far better for all if these Institutions were rendered suitable to the requirements of the great body of the Profession at large, by the institution of a conjoint Board embracing all branches of medical and surgical science, before which every one should present himself for examination, by which he should be tested as to his qualifications, and from which he should receive a State license to practise. If this reorganisation were effected, with certain alterations in the constitution of the College of Surgeons (embraced in the second and third propositions), a College of General Practitioners would be superfluous; if independent, it would be a rival to the College of Surgeons, and destroy those funds now appropriated to important purposes; if inferior or supplemental, it would degrade the Practitioners enrolled in it. It was due to the Council of the College of Surgeons that the Profession were threatened with a third College and its attendant evils; the prayer of the Deputation, therefore, was for an extension of the franchise of the College, and the admission of surgeons in general practice to form a part of the governing Council, that their rights may be protected, a proper education secured, and that every man, if he had talent, should find the highest honours in his Profession accessible to him. Mr. Cartwright further stated that this was the vital point of the question, and as the other parties concerned were on the spot, and the members of the Deputation resided at a great distance, and attended at considerable expense and inconvenience, he respectfully solicited, what he hoped might be accorded at the present interview, that before the Queen's sign manual was put to any new amended charter for the College of Surgeons, a draught of the same might be submitted to the inspection of the Deputation; and in handing in the propositions which he had read, he hoped they would be found so moderate and just that Her Majesty's Government would ultimately accede to them.

The propositions were then handed in, and were as follow:—

Propositions submitted to the Right Honourable Sir George Grey, Bart., by delegates from the Provincial Physicians and Surgeons of Manchester, Stockport, the county of Essex, county of Salop, and North Wales, May 2nd, 1850:—

1. That the Colleges of Physicians and Surgeons, once placed in just and harmonious relation with their respective members, and re-organised so as to ensure uniformity and sufficiency of education to all, are amply sufficient for the requirements of the Medical Profession in England, and that the institution of a College of General Practitioners, under such circumstances, would be a needless complication, prejudicial to the interests of the Profession and the public.

2. That the Charter granted to the College of Surgeons in 1843 forms the principal obstacle in the path of Medical legislation, and that the recent alteration of the said Charter, proposed by the Council of the College of Surgeons, is insufficient, unsatisfactory, and unjust; as also the Resolutions of the Council of April 23rd, 1850.

3. That *all* who were members of the College prior to the Charter of 1843, as they attain respectively a standing of fifteen years, shall be admitted to the Fellowship; and *that Fellows* resident in the provinces be eligible to the Council, of which they may constitute one-third part.

4. That as no fee was demanded from those on whom the Fellowship of the College of Surgeons was originally conferred, those who were members in 1843 claim the Fellowship on the same terms.

5. That in the election of the Council the Fellows resident in the country shall have the privilege of voting by balloting papers.

6. That all who shall enter the Profession after the passing of the proposed Bill, shall be registered by no other title than that of Physician or Surgeon; and that such gentlemen as are now in practice shall be registered according to their respective qualifications.

On behalf of the Conference,
WM. WATSON BEEVER, Chairman.

Sir. G. Grey remarked, that both the deputations which had that day waited upon him were desirous of improving the education of the Profession, but sought to do so by different modes of procedure. The propositions now presented went more into detail than the Memorial he had received, and stated the case very clearly in respect to the Colleges. The request to see a draught of the Charter was very reasonable, and should assuredly be granted; he thought it better for all parties that it should be seen. The proposals he would consider.

The Lord Advocate desired that the Deputation would turn their attention to the difficulty as to what was to be done with the General Practitioners who did not belong to the College of Surgeons. He should wish to hear in detail from the Deputation on that point in a few days' time.

Dr. Hastings said: Sir George Grey, I have the honour to present to you a memorial from the President and Council of the Provincial Medical and Surgical Association—an Association consisting of nearly 2,000 Physicians, Surgeons, and General Practitioners, principally resident in the English Provinces, and spread over every part of England, north, east, west, and south. I may remark, that the Society I have the honour to represent on this important occasion, was not formed for the purpose of agitation on this subject, but was founded, many years since, for the advancement of Medical knowledge. The consideration of the improvement of our very imperfect Medical polity soon forced itself on the attention of the members, and, after much deliberation and calm discussion, they resolved upon the adoption of certain principles, on which, it seemed to them, any legislation for the Medical Profession should be founded. From those principles, the Association has never departed; and they are embodied in the Memorial which I now request permission to read to you:—

To the Right Honourable Sir George Grey, Baronet, Her Majesty's Principal Secretary of State for the Home Department.

SIR,—The Deputation from Medical and Surgical Practitioners, residing in various parts of the kingdom, assembled in Conference at Morley's Hotel, Trafalgar-square, London, on Thursday, the 2nd of May, 1850, unanimously resolved to memorialize you in reference to the following considerations:—

That in any legislative measure which may be proposed for the future regulation of the Medical Profession, two principles should be steadily kept in view. 1st. That the public good, irrespective of all mere corporate privileges, should be rendered the paramount object; and, 2nd, that class distinctions in the Profession should have regard only to those relations which have arisen spontaneously in the actual practice of medicine amongst its different members, on the one hand, and between the Profession and the public on the other.

The Deputation would strongly urge the importance of these principles as the only just or permanent basis upon which legislative reform of the Medical Profession can rest.

The provincial Physicians and Surgeons, whom the Deputation represent, have regretted that the subject of Medical legislation has so often been regarded in reference rather to supposed conflicting interests in the Profession itself than to the first of the two principles enunciated above.

Medical Reform, they respectfully submit, involves

considerations, when estimated aright, of much greater moment than misunderstanding and discord amongst Medical Corporations and their respective members, the question being one which possesses the deepest interest for all persons, seeing that upon its proper settlement must mainly depend the character and the skill of those to whom, in the most confiding faith, the public entrust both health and life.

It is clearly of no consequence to the public whether the Medical attendant enjoys any particular title or not, but it is of the last importance that he should be competent to practise his profession with advantage to the community, and more especially is this the case in the provinces, where the ready aid of consultations is not always attainable. Under these circumstances, the Deputation would urge, that resistance should be offered to every attempt to create an inferior grade of Medical men, of but limited education, and of aptitude only for the "ordinary exigencies of practice." The ills to which flesh is heir, afflict persons very much alike in all districts, and in all ranks of life, on which account the same skill should be available everywhere in antagonism. Were the fact otherwise, if the great body of the people were subject to ailments less difficult of management than the wealthy and the aristocratic, some reason would exist in the proposal to educate an inferior grade of practitioners to attend them. The contrary, however, is rather the fact. The unfavourable conditions in which the poor and the struggling classes are placed aggravate very seriously the diseases which befall them, rendering the treatment more difficult and complicated, and its results more precarious.

With respect to class distinctions in the Medical Profession, the Deputation would observe that the wants of the community, and the relations that have spontaneously arisen in the Profession have established and rendered intelligible the division of Physician and Surgeon, the former devoting himself exclusively to the management of internal maladies, and the latter, as a general rule, to the healing art, without any restriction at all. This distinction, recognized by the public, is the only one which exists upon any considerable scale. The term, "General Practitioner," is neither heard nor employed out of London except in connexion with the subject of Medical Reform. It describes, moreover, no separate class; Doctors of Medicine, Fellows and Members of Surgical Colleges, as well as the mere Licentiate of Apothecaries' Hall, *practising generally* or otherwise, according to circumstances of locality and social position. Altogether the term is an inappropriate and an unfortunate one. Were it simply ridiculous, it might be passed over. It has operated, however, most prejudicially upon *provincial* surgeons, as it has fostered an assumption upon the part of certain *metropolitan* surgeons, that a great superiority of attainments and skill is with them, when contrasted with their provincial brethren, because the former, for the most part, include in their practice both midwifery and pharmacy, whilst the latter exclude them. The Deputation would repudiate most entirely so unprofessional a designation as General Practitioner, as also the idea which it is sought to attach to the term. They would remark at the same time that no greater mistake can exist than to suppose that the practice of *pure* surgery in the ranks of the Profession has any existence. A sound judgment and discrimination can recognise no *surgery* that does not involve *medical* considerations. In point of fact, *pure surgery*, which is merely manual and mechanical appliance in disease, is notoriously a fiction as a department of practice, excepting amongst certain classes of empirics.

Individuals from taste or natural talent, or special opportunities, may and do obtain an unusual excellence in some branches of the healing art rather than in others; and in some circumstances such individuals are enabled to dedicate themselves almost exclusively to particular divisions of practice; this, however, is a circumstance determined in nowise by the educational career or collegiate rank.

The great population of London and its immediate environs developes to an unusual extent the division of labour in every pursuit, hence some surgeons are enabled to realise handsome incomes, though pharmacy and midwifery be excluded from their practice. Yet even in the metropolis departmental practice is but the lot of a small minority of Surgeons.

Elsewhere, indeed, the surgeon, whatever be his collegiate title, must almost invariably practice generally from the necessity of the case. And no reason would appear to exist for awarding a higher professional rank to the departmental surgeon, or for assuming upon his part superior attainment. It is well known that some of the most distinguished surgeons have existed among those who have practised midwifery. White, of Manchester, and Hey, of Leeds, may serve as examples. It might be invidious to refer to living instances. It is a truth, moreover, that members of the Council of the Royal College of Surgeons of England do themselves, in some sense, practise generally, they prescribe systematically for all the internal ailments of their private patients, the diseases even of women and children, although they repudiate *practical* midwifery.

The Deputation would press upon your attention the impolicy of any attempted classification of the Profession, according to exceptional instances that have resulted from accidental circumstances. They submit, that in any Medical Bill that may be introduced into Parliament, provision only be made for the future education and registration of physicians and surgeons, indications of University or Collegiate rank being appended to the separate names on the register.

Mere licentiates of the Apothecaries' Company, who legally are neither physicians nor surgeons, the Deputation feel satisfied, constitute a very insignificant minority of Practitioners, certainly not more than one in twenty. They would urge upon you the desirableness of not providing for any continuance of this class, as neither the Government of the country nor the Directors of charitable Institutions recognise their competence. On the part of the Government they are excluded from the Army and Navy, from prisons and from Poor-law Unions; and on the part of the public, from hospitals, dispensaries, and other medical charities.

Still the Deputation would represent to you that, having respect for existing privileges, they would permit the Licentiates in question to register as Surgeons, their limited qualifications being sufficiently expressed by initials appended to their names.

In submitting, Sir, the present Memorial to your attention, it has been the principal object of the Deputation to give prominence to certain considerations which they deem, from some cause, to have been in a great measure overlooked.

Signed, on behalf of the Deputation,
W. Watson Beever, Chairman.

Morley's Hotel, Trafalgar-square, May 2, 1850.

When the Memorial was read and handed in, Sir G. Grey remarked that it was correctly stated, that the Memorial in its essential points agreed with the propositions given in by Mr. Cartwright.

Mr. Noble, of Manchester, stated, that he was anxious to impress on the mind of Sir G. Grey the fact, that in the country there was no distinct tripartite division of the Profession as in London; he was particularly anxious to make this remark, as he feared that Sir George and the Lord Advocate might infer that the number of surgeons engaged in general practice might be considered less than they really were. It was a striking peculiarity of the Profession in the country, that those departmental divisions of it which were so distinctly marked in the metropolis were almost entirely unknown in the large county towns. In the rural districts there was scarcely a surgeon who did not, in addition to surgery, practise medicine,—not even in such a town as Manchester. In their professional pursuits, the country surgeons were compelled to be prepared for every emergency that might arise; consequently, their professional education necessarily extended over every branch of medical and surgical inquiry; and he believed it was not too much to say, that they possessed, to a vast extent, the confidence of the public. He would respectfully ask, therefore, was it right that they should be stigmatised and degraded by being excluded from seats at the Council-board of the College of which they were members? And he would not refrain from observing, that there never would or could be contentment in the Profession so long as that exclusion existed. In answer to the request made by the Lord Advocate, he would state, that the Deputation had that morning considered the heads of a document which would afford the information the Lord Advocate required; it was not yet in a state to be given in, but in a few days it should be forwarded.

The Deputation then withdrew.

The Board of Guardians of Newtown Abbot have awarded to Mr. Gillard, the medical officer, 12*l.* for his increased work in the town, and 8*l.* for the same in Kingsleinton. It was said at the meeting that Mr. Gillard received only 1s. 11d. a day for attending 59 sick persons in the house. His professional conduct was highly commended. The vote was carried by 15 to 6.

DEPUTATION TO SIR GEORGE GREY FROM THE PUBLIC MEETING AT THE HANOVER-SQUARE ROOMS.

A Deputation from a meeting of the General Medical Practitioners of England, consisting of Mr. N. Clifton, Vice-President of the National Institute; Mr. Thomas Martin (Reigate), Mr. J. Propert (London), Dr. Webster (Dulwich), Mr. Peter Hood (London), Mr. James Bird (London), Mr. John Bowling (Hammersmith), Mr. Donald Dalrymple (Norwich), Mr. G. J. Squibb (London), Mr. George Ross (Secretary), and Mr. Thomas Hickstall Smith (St. Mary's Cray), had an interview with Sir G. Grey, on Thursday, the 2nd inst., for the purpose of representing to him the necessity which existed for the grant of a Royal Charter for the incorporation of General Medical Practitioners into an independent College.

The Deputation having been introduced,

Mr. Clifton stated that the object of the Deputation was to obtain the assistance of the Government in promoting the incorporation of general Medical Practitioners—a measure in every respect desirable, as it was calculated to raise the character of the Medical Profession generally, and to render the education of General Practitioners more complete. One of the largest meetings of the Medical Profession hitherto held had lately taken place at the Hanover-square Rooms, gentlemen from all parts of the kingdom being present, and it was there clearly shown that a very great majority of the 10,000 or 12,000 General Practitioners were strongly in favour of a Charter of Incorporation. The General Practitioner was frequently called upon to attend cases of no ordinary difficulty and importance, and, in the country districts, to perform important operations. Their knowledge in every branch of the medical science was constantly put in requisition; and it was not too much to ask that such a body—second to none in usefulness or the importance of its functions—should have accorded to it a status much higher than that it had hitherto enjoyed. Under the present system, the student was examined by the Society of Apothecaries and the Royal College of Surgeons before he could be qualified for general practice; but, while he was nominally a member of both these corporations, he had, in reality, no influence in them, no power of control or voice in the general management. The present examination in anatomy and surgery might be most materially improved if this Charter was granted, and, as in the case of the London University, the candidate or student would reach a much higher degree of proficiency than that at present required. It was admitted that the examination of the London University was the best in London.

The Lord Advocate, who was present with the Home Secretary, said, that the experiment of requiring a greater refinement of knowledge on the part of medical men had already been tried in France, but without the success which was anticipated. Men so elaborately educated would not find it worth their while to settle down as medical practitioners in small country towns and villages and remote places.

Mr. Clifton was confident that, with a much higher degree of education, the General Medical Practitioner would be found equally ready to perform the duties required of him as he was at present. The granting of such a Charter would also be of great benefit to the poorer classes in the increased ability of their Medical attendants. The higher classes could command first-rate skill, but it was not just to suppose that the poor should be obliged to put np with inferior attendance. (Sir G. Grey "Clearly not.") The members of the College of Surgeons had been discontented with the constitution of that body since its first establishment, and the new Charter proposed was far from meeting the views of the general Medical body. Many clauses in that Charter were ambiguous, if not injurious, in their tendency. While Sir J. Graham held office, the General Practitioners had waited upon him by deputation, and he had warmly seconded their views. At his instance a joint deputation of General Practitioners and members of the Society of Apothecaries was formed, with full authority on behalf of the

National Association to accept such a Charter as the Crown might be advised to grant, and on behalf of the Society of Apothecaries to relinquish their present privileges. The gentlemen selected at a meeting of 900 members of the Association succeeded in obtaining from the Government a Bill, bearing date the 7th of May, 1845,—the only one in which the General Practitioners were in any degree provided for. The Bill was opposed by the Royal College of Surgeons, the principals of which, he must say, had always shown a readiness to keep down the interests and *status* of the General Practitioner as far as possible; and the Bill was abandoned by the late Government in consequence of that opposition. They hoped that the Government would not consider, that the fact of a Medical man practising Midwifery and Pharmacy should exclude him from any privileges in the College of Surgeons. The proposed Charter for the College of Surgeons was in every way calculated to injure the interests of the Medical Profession; and, as repeated conferences had been held and propositions made to the College, with a view of a satisfactory adjustment of the rights of General Practitioners, without success, it was hoped that the Government would grant the Charter of Incorporation, which would enable them to examine students for General Practice. Not only would this step conduce materially to the advancement of Medical science generally, but the public would be great gainers by it.

Dr. Webster, Mr. Bird, Mr. Bowling, Mr. Martin, and Mr. Dalrymple, urged successively the inutility of the present system, its depressing effect upon the Profession generally, and the various advantages which would follow the grant of a Charter of Incorporation.

The following were the terms in which Mr. Bird stated the case:—That the Medical Reform question involved a principle of far higher moment than the adjustment of the dissensions between the members and the Councils of the existing Medical Corporations; that whatever differences existed between the members of this or that College and its governing body, they were questions for private arrangement, and hardly required legislative interference; at any rate, they were questions of but secondary importance compared to the main principle involved in the present agitation, namely, the means of providing for the due and efficient education of that order of Medical Practitioners, whose duties were often of the most onerous and important character, and of whom the present Deputation were the representatives. Without, in the least degree, undervaluing the extent of the injustice inflicted upon the members of the College of Surgeons, by the measures adopted in reference to the Fellowship, other causes have been in operation for several years past, tending to develope a policy to which the majority of the Profession are in the highest degree opposed; namely, the desire on the part of the existing Colleges to specialise their functions, and to arbitrarily fix a limit to the attainments of the General Practitioners. Legislation in medical affairs, to be either satisfactory or enduring, must be based upon the principle of public utility, irrespective of the individual interests of any of the Medical Corporations. It must be borne in mind that the General Practitioners have hitherto obtained their education and examinations in medicine, chemistry, pharmacy, and obstetrics, under a curriculum of study framed by the Court of Examiners of the Society of Apothecaries; that this curriculum has been year by year improved and extended until it has attained its present high state of efficiency, and that it stands recorded, on the evidence of parties most competent to form an opinion, that the education and the examinations of the General Practitioners by the Society of Apothecaries had proved of essential service to the public, whilst it reflected the highest amount of credit upon the parties who had so liberally and creditably fulfilled the duties that were entrusted to them under the Apothecaries' Act of 1815, which, with all its imperfections, had been productive of considerable benefit both to the public and the Medical Profession. The General Practitioners are satisfied with that portion of the education they have received under the Apothecaries' curriculum, and they have never complained of its being inefficient, no parties have proclaimed their incompetency to manage the large amount of medical practice that necessarily devolves upon them, and a very strong, and, as I believe, a very justly strong opinion prevails in their minds, that it is to the Society of Apothecaries having possessed the unrestricted right to frame a curriculum of education to be followed by the candidates for their license to practise, that the very satisfactory acquirements of the General Practitioners, as respects Medicine, Chemistry, Pharmacy, and Obstetrics, is to be attributed. By the document I now hold in my hand, it appears that the Council of the Royal College of Surgeons propose that the important privilege I have alluded to should be forthwith taken away, and that a system which for thirty-five years has been found to work so satisfactorily, that not a single complaint has been whispered to its disparagement, without any petition, or solicitation, from any source whatever, should be set aside, and the duties transferred to other parties, one of whom, by some fatal mismanagement of the Surgical portion of the General Practitioners' education, and by comparatively lowering their status, has raised the indignation and excited the jealousy and suspicion of every General Practitioner from one end of the Kingdom to the other. Without wishing to say anything disparaging of the existing Colleges, I have no hesitation whatever in affirming, Sir—and I am sure I speak the sentiments of every gentleman present—the transfer of the powers held by the General Practitioners to a Joint Board of Physicians and Surgeons, whereby the control and management of their own affairs would be taken out of their hands, will not be willingly assented to by one General Practitioner out of a hundred. After many years of painful agitation, disturbing the peace and equanimity of a learned and peaceful Profession,—an agitation arising from such deeply-felt grievances, as have induced a body of gentlemen, from the want of any recognised head to represent them, to resort to public meetings to express their wishes,—the National Institute, still believing that they truly represent the wishes and inclinations of the majority of the General Practitioners, and also in the full conviction that the public interests would be best consulted by the arrangement that they propose, desire to impress upon the Government their earnest conviction, that the only effectual solution of the difficulties of the Medical Reform question, is in the establishment of a new and independent College of Medicine, Surgery, and Midwifery.

Dr. Webster pressed Sir Grey to give some information as to the intention of the Government on this matter.

Sir George Grey replied, that at present he was unable to comply with that request.

The Deputation then withdrew.

HEALTH OF LONDON DURING THE WEEK ENDING MAY 4.

In the week ending last Saturday, the deaths registered in the metropolitan districts numbered only 829; a result which, if compared with the returns of corresponding weeks in ten previous years (1840-9) is less than in any week except those of 1841 and 1842. The average number of deaths in corresponding weeks is 883, or raised in the ratio of increase of population 963; on which a decrease is apparent in the deaths of last week, amounting to 134. From diseases of the zymotic or epidemic class, the total deaths last week were 159, the corrected average being 181; and to take particular diseases, small-pox was fatal to 7 persons, or half the average; scarlatina and hooping-cough respectively to 17 and 36, also less than the average; measles to 17, or about the usual amount. But croup destroyed 15 children, which is double the ordinary fatality from this complaint. Also the wife of a butcher, aged 36 years, died in Halsey-terrace, Chelsea, of "spasmodic croup (18 hours.) Typhus was fatal in 28 cases—considerably less than usual. Diarrhœa appears to decline, the deaths from it in the last three weeks having been 19, 11, 10; in the week corresponding to the last in 1848 and 1849, they were 19 and 20. The mortality from diseases of the respiratory organs differs little from the amount that generally prevails at this season of the year. It is sufficiently worthy of remark, that consumption has recently carried off weekly much less than the usual number of its victims; last week the deaths from it were only 102, though in the corresponding weeks of ten previous years they ranged from 121 to 168, and the corrected average is 157.

The deaths in the several hospitals of London occurred as follow:—

GENERAL.		Sussex & Brandenburgh-house (Fulham)	0
St. George	5	Northumberland-house	0
Westminster	6	Whitmore House	0
Grey Coat Hospital	0	Pembroke House	0
Charing-cross	1	St. Luke	1
Middlesex	2	Miles'	1
University College	1	Warburton's	0
Royal Free Hospital	0	Lunatic Asylum, Bow	0
King's College	3	Bethlem	0
St. Luke, City-road	0	Lunatic Asylum, Brixton	0
St. Bartholomew	12	Retreat, Clapham	0
London	16	York House, Battersea	0
Guy's	12	New County, Wandsworth	5
St. Thomas	5	Peckham House	1
Bethlem, London-road	0	Camberwell House	0
FOR CONVICTS.		LYING-IN.	
Hospital Ship, Unité	0	Queen Charlotte's	1
Penitentiary Hospital, Millbank	0	British	0
MILITARY AND NAVAL.		City of London	1
Royal Hospital, Chelsea (South)	0	Hospital, York road, Waterloo 2nd part	0
Royal Hospital, Greenwich (East)	5	FOR PARTICULAR CLASSES.	
Royal Military Asylum	0	Female Servant Invalid Asy., Stoke Newington	0
Coldstream Guards Hos.	0	German Hospital	0
Grenadier Guards' Hospital	0	French Hospital	0
Scots Fusilier Guards	0	Portuguese Jews' Hospital	0
Royal Ordnance	0	German Jews' Hospital	0
Dreadnought Ship	1	FOR SPECIAL DISEASES.	
LUNATIC.		Small Pox	3
Kensington House	0	Fever Hospital	3
Munster-house (Fulham)	0	Lock	0
Normand-house (Fulham)	0	Consumption, Brompton	0
Otto-house (Fulham)	0	Opthalmic, Charing Cross	0
Blacklands-house	0		

TOTAL, 85.

MORTALITY TABLE.

Deaths in the Week ending Saturday, May 4, 1850.

(Metropolis.)

CAUSES OF DEATH.	Total.	Average of Ten Weeks.
ALL CAUSES	829	883
SPECIFIED CAUSES	816	877
Zymotic (or Epidemic, Endemic, and Contagious) Diseases	159	166
SPORADIC DISEASES:		
Dropsy, Cancer and other Diseases of uncertain or variable seat	30	49
Tubercular Diseases	146	190
Diseases of the Brain, Spinal Marrow, Nerves, and Senses	108	113
Diseases of the Heart and Blood-vessels	43	28
Diseases of the Lungs, and of the other Organs of Respiration	138	125
Diseases of the Stomach, Liver, and other Organs of Digestion	45	53
Diseases of the Kidneys, &c.	9	8
Childbirth, Diseases of the Uterus, &c.	7	10
Rheumatism, Diseases of the Bones, Joints &c.	6	8
Diseases of the Skin, Cellular Tissue, &c.	1	1
Malformations	6	2
Premature Birth and Debility	13	21
Atrophy	14	12
Age	30	54
Sudden	10	10
Violence, Privation, Cold, and Intemperance	51	23
Causes not Specified	13	5

The following is the number of Deaths occurring from some of the more important special causes:—

Apoplexy	30	Heart	35	Phthisis	102
Bronchitis	44	Hooping-cough	36	Pneumonia	65
Cholera		Hydrocephalus	24	Scarlatina	17
Childbirth	2	Influenza	2	Small-pox	7
Convulsions	28	Liver	11	Stomach	3
Diarrhœa	10	Lungs	12	Teething	8
Dropsy	4	Measles	17	Typhus	28
Erysipelas	9	Paralysis	18	Uterus	4

BIRTHS AND DEATHS.

	Births.	Deaths.	Births over Deaths.
Males	718	419	299
Females	738	410	328
Total	1456	829	627

METEOROLOGY OF THE WEEK.

Day.	Mean of Barometer.	Mean of Thermometer. Dry.	Ditto. Dew Point.	Difference between the Mean Temperature of the day and the same day on an average of 7 years.	General Direction of Wind.		Amount of Horizontal Movement of the Air.	Rain in Inches.	Electricity.*
					A.M.	P.M.	Miles.		
Sunday	30·129	44·2	33·2	— 6·7	N.E.	N.E.	85	0·00	Nothing was shown at any examination.
Monday	30·180	46·7	34·4	— 5·6	N.E.	N.E.	35	0·00	Positive, and tension weak at 3 p.m.
Tuesday.....	30·068	45·9	33 9	— 5 9	N.E.	N.E.	105	0·00	Positive, and tension moderate at 3 p.m.
Wednesday.	29·933	42·5	33·1	— 9·7	N.	N.	160	0·02	Nothing was shown throughout the day.
Thursday ...	30·117	44·4	31·5	— 8·0	N.	N. & E.	100	0·00	Nothing was shown throughout the day.
Friday	30·101	46·7	33 3	— 5·8	E.S.E. to W passing S.	W.	51	0·00	Positive, and tension variable throughout the day.
Saturday ...	29 753	49·1	39·6	— 3·3	W.S.W.	W S W to N	95	0·09	Strong negative electricity, with galvanic currents, and sparks, were exhibited during several squalls before and after noon.
Mean ...	30·040	45·5	34·1	— 6·4	N. & E.		sum 625	sum 0·11	

* In this Column, A. stands for Active; N. for Negative; and P. for Positive.

MEDICAL NEWS.

APOTHECARIES' HALL.—Names of gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, 2nd May, 1850:—John Latimer Parke, Derbyshire; Augustus Dimock; Frederic Hezekiah Hartshorne Braseley, Salop, Devon; John Furse, Southmalton, Devon; William Michell Clarke, Bodmin, Cornwall; Cornelius Hanbury, jun., Stoke Newington; James M'Carthy, Romford, Essex; Thomas Allin Haigh, Honley, near Huddersfield; Henry Strangways Hounsell, Bridport, Devon; John Smith Wills, Axminster, Devon.

ROYAL COLLEGE OF SURGEONS.—The following gentlemen having undergone the necessary examinations for the diploma, were admitted members of the College at the meeting of the Court of Examiners on the 3rd inst.:—Messrs. Thomas Ward, Kingston, Surrey; John Barclay Scriven, Hereford; Edward Bishopp Dorman, Kinsale, County of Cork; William Morse Graily Hewitt, Bradbury, near Swindon, Wilts; Henry Scholfield Johnson, Liverpool; Morris Davies, Dyffryn, Merionethshire; William Henry Arthur, Knaresborough, Yorkshire; Charles John Robert Watts, Battle, Sussex; and James Young, Sligo, Ireland.

UNIVERSITY COLLEGE.—Distribution of Prizes. Medicine: Gold medal, T. G. Fitzgerald; 1st silver, C. W. Hammond; 2nd ditto, S. Morris; Certificate, R. Bowman. Comparative Anatomy: Gold medal, T. G. Fitzgerald; Certificate, R. Neale. Anatomy and Physiology: Gold medal, J. S. Gamgee; 1st silver, J. W. de Tunzelman and J. Lister (equal); Certificates, T. Hillier, S. W. Sibley, G. Buchanan, E. J. Miles. Chemistry: General Course, Gold medal, J. W. de Tunzelman; 1st silver, R. Grundy; 2nd ditto, H. Simpson; Certificates, G. A. Humble, S. H. Blackmore, J. Footman, A. Ingham, A. Dupuy, W. B. Ramsbottom. Essay Prize, silver medal, W. J. Russell. Birkbeck Laboratory Students: Gold medal, W. Kenrick; silver, H. E. Roscoe; Certificates, S. Cathcart, J. Fox, A. Haslam, M. Haynes, J. Alston. Anatomy: Senior Class, Gold medal, J. W. de Tunzelman; 1st silver, J. Lister; 2nd ditto, T. Hillier; Certificates, J. C. Agnis, J. D. Weaver, E. J. Miles, D. D. Davies, J. J. Ritchie. Junior Class: Silver medal, J. L. Lawrence; Certificates, F. W. Sayer, J. R. Bensley, J. Ekin, J. Edwards, T. Veal, E. Andrews, J. M. E. Long, W. Musket, A. Dupuy, G. Buchanan, W. H. Flower. Midwifery: Gold medal, H. Gramshaw; 1st silver, F. Martin; 2nd ditto, D. D. Davies; Certificate, J. P. Nash. Surgery: Gold medal, H. Thompson; 1st silver, C. W. Hammond; 2nd ditto, T. G. Fitzgerald; Certificates, J. P. Langham, J. C. Agnis, L. W. Sibley, J. B. Scriven, M. E. B. Nicholson, W. G. Bacot, S. Morris. Fellowes' Clinical Medals: Gold, Summer, 1848, H. Briggs: Winter, 1848-49, J. R. Reynolds: Prize of 40*l.*, general proficiency, H. Briggs. Summer Term, 1848-49, Pathological Anatomy, Gold medal, T. G. Fitzgerald. Medical Jurisprudence; Prize, H. Lawrence. Botany: gold medal, J. Z. Lawrence; silver, J. W. de Tunzelman.

KING'S COLLEGE.—The Annual Report of this Institution was read on the 26th ult. During the last Lent term, 159 students had matriculated in the Medical department, 37 having also entered as occasional students. The Council lamented the limited accommodation afforded by the Hospital, both to the Medical students and to patients. This difficulty had been taken into consideration, and it had been determined to set on foot a fund for the erection of a new hospital. A sum of 5,000*l.* had been given anonymously for this purpose, on the condition that the Council voted an equal amount. The Council have done this, and a sum amounting to 25,000*l.* has been already obtained, 50,000 being the total required. The receipts of the Institution for the year, from the Medical department, are 3540*l.* 1s. 9d.; Hospital fees, 1706*l.* 5s. The total receipts are 35,655*l.* 13s. 9d.: total expenditure, 34,238*l.* 17s. 2d. The following gentlemen were then elected in the Council:—Mr. W. E. Gladstone, M.P.; Mr. Justice Patteson, the Rev. Archdeacon Harrison, the Right Rev. Bishop of Winchester, Mr. J. H. Green, Mr. H. Pownall, Alderman Copeland, M.P., and the Rev. J. S. M. Anderson, M.A. Alderman Thompson was appointed treasurer. The prizes were next distributed. Anatomy: Prize, Albert D. Smith; Certificates, C. Monteiro d'Almeida Lempriere, and E. Liddon. Physiology: Prize, John K. Spender; Certificates, A. D. Smith and J. H. Sylvester, æquales; E. Liddon and C. Rothwell, æquales. Chemistry: Prize, W. E. Masfen. Chemical Manipulations: Prize, C. Pardey. Surgery: Prize, G. May; Certificates, E. A. H. Head, and N. Wilkinson, æquales; E. D. Everard. Medicine: Prize, R. Wilkinson; Certificates, W. Hewett and Robert Fowler. Midwifery: Prize, E. Simpson; Certificate, R. Fowler. Botany: Prize, F. W. Headland; Certificate, S. B. Partridge. Forensic Medicine: Prize, W. Hewett; Certificates, R. Fowler and S. L. Bigge. Comparative Anatomy: Prize, F. W. Headland; Certificates, T. C. Beale and J. S. Biggs. Medical Clinical (winter session): Prize, R. Wilkinson; Certificate, J. C. Dickenson. Medical Clinical (summer session): Prize, T. C. Beale. Surgical Clinical (winter session): 1st. Prize, W. Hewett; 2nd. Prize, E. A. H. Head. Divinity Students in the School of Medicine: Warneford prizes: 1st. Prize, George May; 2nd. ditto, A. D. Smith. Leathes prizes: 1st. Prize, J. K. Spender; 2nd. ditto, E. A. H. Head. Associates: L. S. Beale, R. W. Broster, J. Challice, M.D., J. D. Chepwell, S. L. Dyer, H. Hailey, H. Hensley, T. Massey, C. Pardey, S. R. Pittard, J. B. Ruck, H. H. Salter, and Halel Risk Allah.

NAVAL APPOINTMENTS.—Surgeon B. Verling (1829) from the Crocodile to the Ajax; Assistant-Surgeons Charles L. Leicester (1845) and Godfrey J. A. M'Cullagh (1844) from the Crocodile to the Ajax; Assistant-Surgeon J. G. Campbell (1846) to the Wellesley, 72, flag-ship on the North American and West India station; Assistant-Surgeon L. J. Monteith (1843) to the Comet; Assistant-Surgeon H. H. Smith, M.D. (1848), acting in the Champion sloop, 14, in the Pacific, confirmed in her; Assistant-Surgeon John W. Duncan (1849) from the Wellesley, acting in the Alarm, 26, on the North-American station, confirmed in her.

MILITARY APPOINTMENTS.—16th Foot, Surgeon H. Cooper Reade, from the 76th Foot, to be Surgeon, vice Hamilton, deceased.

OBITUARY.—On the 1st instant, at Haverhill, Suffolk, Henry Martin, Esq., surgeon, aged 51, highly respected by a large circle of friends, and who for many years had successfully practised his Profession in that town.

A cutaneous disease, resembling small-pox, is said to have broken out at St. Christopher's, West Indies, and to have proved fatal in some instances.

TO CORRESPONDENTS.

The crowded state of our columns as regards political matters of the first moment to the Profession, must be our excuse for omitting much of our usual Foreign Correspondence and Extracts from Journals. We are also sadly behind hand—and for the same reasons—with our reports of the Meetings of Medical Societies. We have a mass of correspondence also in type, and our many friends must pardon us, that we delay its publication.

"Scrutator."—We have nothing to do with the private affairs of any man; and desire that we may not be troubled further on the subject.

"M.D.L."—Yes. M. Flourens having injected ether into the arteries of certain animals, observed that motility disappeared before sensibility. The contrary is usually observed in the human subject after inhalation.

"Inquirer."—We understand that the Lectures on Race, by Dr. Knox, which formerly appeared in this Journal, are in the course of illustration by Dr. Westmacott, of King's College, preparatory for publication as a separate volume.

"Students."—We are surprised at such a statement. A reference to the works of Sonnerat, Forster, Abel, &c., will show that some kinds of water plants thrive abundantly well in water at a temperature which would have been sufficient to boil them, had they been destitute of vitality.

"A. B., Paddington."—We never prescribe, nor give advice; but we think our Correspondent had better take advice before he emigrates.

"A Surgeon in General Practice."—A candidate for the diploma must reside. He will be examined—in English if he desires it—in anatomy, physiology, materia medica, chemistry, pathology, therapeutics, and midwifery.

"Potato Disease."—The Correspondent who inquires concerning this disease, is referred to Dr. Turley, of Worcester, who, we are assured, will readily, and none more ably, reply to any queries that may be submitted to him.

"Students."—Glycerine is prepared by digesting equal parts of ground litharge and olive-oil with boiling water, stirring and keeping up the water as it evaporates. When of the consistence of plaister, wash well with hot water; decant the latter, and filter; pass sulphuretted hydrogen to throw down the lead,—filter and evaporate to a syrup in a water bath.

"A Victim."—The amount cannot be recovered. Let our Correspondent be thankful it was no worse.

We regret that press of matter has hitherto prevented our finding room for reviews of the works of Dr. Arthur Hill Hassell. We are quite aware of the opinions of the German reviewers concerning the "Microscopic Anatomy of the Human Body." We shall take an early opportunity of stating our own.

"A.B." is not the first who, suddenly applying to the nose of a *somnambule* a bottle of strong ammonia, received a severe box in the ear from the fair subject of his experiment.

"J. P. X." need not be alarmed. Excitement is a sufficient cause. The descriptions by the ancient poets of the stench sometimes set up by their Thaides, on certain occasions, are almost suffocating.

"C.P., Glasgow."—We have not reviewed the work in question. Our columns are too well filled to waste them upon such trash.

"Mr. Redman, of Lincoln," writes as follows:—"In your hebdomadal impression of the 27th ult., is a contribution by Dr. Bushnan, who despicably contemns the science of mesmerism, particularly that important division of it—clairvoyance, which he terms 'the favourite hobby of the mesmerists;' it is on this subject that I wish to direct attention. It would appear, that Dr. Bushnan has neither heard nor read of the circumstances of the Arctic expedition having been disclosed by two females in a state of clairvoyance, both of whom predict the return of Sir J. Franklin to England, in the month of September next, otherwise he would have omitted that portion of his paper which has reference to the indefatigable Arctic explorer. I allude to the Bolton and Liverpool oracles, and am desirous that Dr. Bushnan refers to them; the last case occurs in the 'Weekly Times,' of the 31st March, 1850. I have no desire either to corroborate or depreciate the remarks advocated by Dr. Bushnan, as time alone will indisputably testify their value."

[We beg to assure Mr. Redman, that Dr. Bushnan is well aware of the sayings and doings of the Bolton and Liverpool "oracles." The ladies alluded to not only see clearly through stone walls, but foresee the future. In addition to the faculty of clairvoyance, they enjoy the divine gift of prophecy. If people will persist in believing such things after the exposures which have been made, we cannot help it. It has ever been the history of the world—knaves and dupes; without the latter, the former would cease to exist; and from their success, the number of the mystified must be "prodigious."]

"D. D. D., Preston."—Consult Mr. Markwick's work.

We will publish next week the "pass paper" at the St. Andrews.

We beg to call the attention of our readers to a specimen of Iodide of iron in a new dress. Hitherto this valuable salt has never been obtained in a neutral state; being deliquescent, it was constantly undergoing spontaneous decomposition. These objections, we understand, are entirely obviated in the Saccharated Iodide.

ORIGINAL LECTURES.

THE LUMLEIAN LECTURES FOR 1850.

DELIVERED AT THE ROYAL COLLEGE OF PHYSICIANS.

By R. B. TODD, M.D., F.R.S.

ON THE PATHOLOGY AND TREATMENT OF DELIRIUM AND COMA.

LECTURE II.

(Concluded from page 349.)

To the state of hysterical coma we must refer that remarkable condition which may be produced in some hysterical women, and in men and lads of similar habit, which is called the mesmeric sleep—a state in which consciousness may be wholly destroyed, and a complete coma produced, or in which a half consciousness remains, accompanied by more or less of a delirious state, in which the patient may exhibit those phenomena, and perform those strange feats of second sight, or *clairvoyance*, which have so much delighted the lovers of the marvellous. As the ordinary hysteric coma may disappear rapidly, so will this also under favourable circumstances; whilst, at other times, the comatose condition remains for some time, and only gradually subsides. The best proof that the so-called mesmeric state is no more than what one may call *an artificial hysteric coma*, consists in the fact that all the phenomena of it will sometimes manifest themselves spontaneously, without any apparent exciting cause; at least without any cause such as can be regarded as a mysterious influence acting from one individual to another.

On the 2nd of April, 1843, a boy, Alfred Russon, aged 16, was brought into King's College Hospital in a state of what I must call *hysterical coma*, or, to connect it with phenomena otherwise produced, mesmeric coma. The only history we could obtain of him was, that he had, about two o'clock in the morning, walked into a coffee-shop in Drury-lane, where he was found sitting in one of the boxes, speechless and insensible. He was handed over to the police, by whom he was brought to the hospital. The house-physician found him sitting erect on a chair, his eyes widely open and motionless, pupils dilated, and presenting an undulating motion when the candle was placed near them; conjunctivæ rather injected; countenance expressive of astonishment; respiration easy, although a little quicker than it ought to be; power of deglutition perfect; no spasm or twitching of any single muscle. The most remarkable feature was his utter insensibility to every external impression; even the roughest treatment produced no effect upon him; the splashing of cold water, shaking, pinching, shouting in his ears, seemed to make no impression. He had walked into the hospital between two policemen; whilst in the surgery of the hospital he never altered his position in the slightest degree; and after having been examined in the surgery, he walked up stairs to his ward without dragging his feet, but aided by the policemen.

After he was placed in bed he continued in the same state of insensibility to external impressions, but appeared to resist any attempt to alter the position of his limbs, and exhibited a disposition to retain the limb in any position in which it was placed. He kept for some time continually opening and shutting his mouth at regular intervals, and winked his eyes naturally, and moved his eye-balls from side to side.

At 10 a.m., eight hours after his admission, he was still insensible; his bladder became much distended, and three pints of urine were drawn off, which exhibited no morbid character, but was of low specific gravity, 1010.

He remained in this state the whole of the 2nd, and on the 3rd he was still found insensible, having not uttered a sound since his admission. He was taken out of bed, and an attempt made to place him in the erect posture, but his whole body became rigid, all the muscles being thrown into powerful tonic contractions: he was returned to his bed, where he lay in the same insensible state; the urine accumulated in his bladder, and had again to be drawn off.

To-day various expedients were resorted to, to test the reality of his insensibility, which ended in confirming our belief, from the appearance of the patient, that he really was insensible. Among other means employed, the soles of his feet were fillipped with a wet towel, without exciting the least indication of sensibility. A bottle of strong ammonia was held under his nostrils, but the fumes produced no effect beyond watering of the eyes; and after some time he turned away his head. He continued to lie in bed apparently unconscious, but occasionally snapping with his teeth.

On the second day after his admission (the 4th) he made signs for paper, and wrote an account of himself, stating that he had been subject to fits, and giving the address of his father, and also giving a history of himself during the day previous to his admission to the hospital. But it was very remarkable that in writing he seemed to trust entirely to the guidance of his sense of touch, for during the whole time he was writing he kept his eyes averted from the paper with a fixed gaze directed towards the ceiling, and when a handkerchief was applied round his eyes, it did not interfere with his ability to write. But we could not obtain any satisfactory evidence that he could see, or hear, or smell.

After this he began to ask for food, and ate with the most extraordinary eagerness, snapping at everything that came in contact with his lips: even pieces of paper, which he chewed and swallowed.

In the afternoon of this day he began to see, and amused himself reading and writing, in both of which he showed himself a proficient.

He was still defective in hearing and in the power of speech; he seemed quite insensible to the loudest noises; shouting into the ear, which generally produces so disagreeable a sensation in the meatus, seemed to produce no effect upon him, either upon the common sensibility or upon the hearing. We could only converse with him on paper, and he showed great readiness in keeping up the conversation.

He continued in this state in the Hospital nearly three weeks from his admission: various means and devices were tried to ascertain whether he could hear; but all who saw him, both nurses, patients, students, and visiters to the Hospital, agreed in opinion that he could not or did not hear, or that if he did hear he carried on his deception in the most remarkable manner.

Nor could he be induced to speak: on one occasion I ordered him to be kept without food until he spoke; but the effect of this was merely to cause a paroxysm of hysterical crying.

Unfortunately this patient was inveigled from the Hospital by some devotee of mesmerism; and he was placed under the care of a physician who unhappily misapplies his great talents to what I can regard no otherwise than as the conjurings of mesmerism. By this gentleman he was mesmerised daily for one hour for the space of four weeks. After one of these mesmeric sittings he recovered his hearing, and in three quarters of an hour after that his speech. I cannot help, however, expressing my belief, that, as his health had greatly improved under the discipline and treatment to which he was subject in the Hospital, he would have recovered both his hearing and his speech in less time than under the mesmeric processes, which, indeed, I cannot doubt, had the effect of retarding recovery; for I can no more believe that the hysterical disposition is to be removed by the frequent repetition of the hysterical paroxysms, than I can suppose that the tendency to epilepsy is to be cured by the daily repetition of an epileptic fit.

I am confirmed in my belief that this patient would have perfectly recovered without the aid of the mesmeric mysteries, by the favourable result of another case, which we succeeded in keeping out of the hands of the mesmerists.

The patient, in this case, was a girl of nineteen years of age, of a nervous temperament. She accidentally fell into a river, and was immersed in deep water for many minutes; she was taken up in a state of suspended animation. Six hours elapsed before she recovered her senses; and she continued unwell and depressed with headache for several days after the accident. Ten days after it she had an hysterical paroxysm, and lay for nearly four hours in a state of stupor, out of which she came, deprived of the power of speech and of hearing, as well as of taste and smell, and her mental faculties quite benumbed or paralysed, as she gave no indication that she recognised any of her friends about her.

An admirable account of this case has been given in the *Lancet* for 1845, by my friend Mr. Robert Dunn, to whose kindness I am indebted for the opportunity of seeing it. The patient recovered perfectly under a treatment directed to the improvement of her physical health and strength, and is now in a perfectly healthy state.

Whatever be the nature of these comatose hysterical affections,—whether they occur in men or in women, and whether they are complicated with ecstatic or cataleptic phenomena,—the general tendency is for them to get well. Nor have we any evidence of the existence of any inflammatory or other organic lesion in the brain or other part of the nervous system in these cases. There cannot, indeed, be any doubt that they are never accompanied by an inflammatory state of the brain or its membranes.

TRAUMATIC COMA.

I shall next refer to a form of coma which accompanies injuries and severe operations, which is well known by the name of *concussion*, when occurring in consequence of injuries to the head.

The phenomena of concussion are these:—A man gets a violent blow on his head, without any fracture or injury of the bone: he is stunned; in other words, he is rendered comatose from the moment of the injury. If the blow be not severe, he remains insensible for a little time, and then recovers perfectly; or, if the shock be great, he becomes cold, his pulse intermittent, and he dies apparently from the shock, the insensibility remaining to the last; or he remains insensible for some time, then becomes delirious, and ultimately recovers. Such is the history of concussion of the brain, or traumatic coma from shock to the brain. When you examine the brain in fatal cases, you find it in an apparently healthy state. "From such examination," says Sir Benjamin Brodie, in his valuable paper on Injuries of the Brain, in Vol. XIV. of the Med.-Chir Transactions, "we learn that the symptoms which are ascribed to concussion do not depend on any such derangement of the organization as admits of being disclosed to us by dissection. The brain appears to retain its natural structure unimpaired." And not only does this state of coma occur in cases of injury of the head, but also from the shock produced by severe surgical operations or other injuries.

Many years ago I was present at the operation of lithotomy on a boy nine years old. The operation was done in the ordinary way, without any untoward accident which could endanger the favourable result. The evening after the operation the child began to be comatose, with cold extremities and small pulse, and without the least indication of peritonitis. The patient continued in this comatose state for three days, and died. I examined the body with great care, but could not detect any morbid appearance except a general pallor of all the internal organs.

Severe and extensive burns and scalds create, at the moment of the accident, or very shortly after, a state of more or less complete coma.

This state of coma may be due partly to the physical effect of the shock, and partly to the mental trouble of the severe fright. Such was probably the mode of death in the case of the young woman known as the Lion Queen, who formed part of the company attending Wombwell's menagerie. The case was reported in the newspapers some months ago. The girl, while playing with the tiger, vexed him, whereupon he seized her neck in his mouth, and inflicted a severe wound in the neck, which exposed the carotid artery without injuring it. The girl, as I learned from a medical friend who witnessed the attack of the tiger, fell senseless; and, although she lost no blood, continued senseless and pale, and died in less than a quarter of an hour.

We learn, then, from these facts, that a shock is capable of producing a state of coma without the existence of any active morbid process of the brain.

Coma from Compression.—A special form of coma is that which has most attracted the attention of

observers as affording an easy and obvious explanation of the phenomena. This is coma from compression of the brain by some new material developed within the cranium or introduced into it, or by the effusion of blood. Hæmorrhage takes place into the substance or the ventricles of the brain, or on the surface of it, and coma ensues, which is more or less according to the magnitude of the clot of blood. The brain or parts of it are evidently compressed by the large quantity of blood effused; for we have obvious marks of compression in the condensation of the neighbouring brain structure. The degree of the coma is influenced, not merely by the magnitude of the clot, but also by the situation of the effusion: thus blood effused at the base of the brain or into its ventricles will produce a greater amount of coma than if the blood had been poured out on the surface or in the substance of the hemispheres of the brain; and, moreover, a slight clot on the base of the brain, especially on the pons and medulla oblongata, while it produces profound coma, will quickly kill the patient; while a large effusion into the ventricles will likewise create profound coma, but one by no means so rapidly fatal to life.

I had an interesting illustration of this many years ago in two cases which occurred on the same day. One was a man who was convalescent from fever, and had got out of bed and assisted to make his bed, when he fell like a horse pithed, and died immediately. The second was a man in the hospital for disease of the heart, who suddenly became profoundly comatose, with great stertor, but lived many hours. In the first case a *small* clot had been effused on the pons varolii, near its posterior margin, and extending on to the medulla oblongata. In the second case a *very large quantity of blood* was poured into the lateral ventricles, and distended them both. The small clot in the first case caused rapid death, because it compressed suddenly the medulla oblongata, "the link which ties us to life," as Mr. Mayo happily terms it. The large clot caused profound coma, but was not so rapidly destructive to life, because at first it compressed chiefly parts more immediately concerned in mental phenomena.

On the same principle, the accumulation of water in the ventricles produces coma; and in these cases we have abundant evidence of compression, in the condensation of the surrounding brain substance, the widening of the ventricles, the firmness of their walls when the cavity is laid open, in consequence of which in the recent brain they will not collapse, and the flattening of the convolutions.

So, also, the growth of a tumour within the skull; an aneurism of the basilar artery; an exostosis from the interior of the cranium; a piece of bone depressed at the seat of a fracture,—are capable of producing compression of the brain, and consequent coma.

May increased subarachnoid effusion cause coma?—It is a popular notion, adopted on very feeble grounds, that compression of the brain, and consequently a comatose state, may be caused by the accumulation of fluid around the ventricles. There are some very good reasons for adopting the contrary opinion, that the existence of fluid in the subarachnoid space never does compress the brain, and cannot be regarded as a cause of coma by compression.

1st. It is clearly proved, by the researches of Cotannius and of Magendie, confirmed by the best subsequent observers, that a certain quantity of fluid in the subarachnoid space, both in the cranium and in the spine, is essential to health, and that this fluid is in greater abundance in the old, where the brain has begun to shrink, than in the plump well-developed brain of the young and adult.

2ndly. That in cases where the largest collections of fluid have been found around the brain, that organ has been found shrunk, not compressed; the brain has wasted from a defective nutrition; there is no flattening of the convolutions, nor condensation of the brain substance, but a shrinking of the convolutions,—a widening of the sulci between them, without any morbid change, either one way or the other, in the density of the substance of the brain. Thus it may be laid down, that the quantity of subarachnoid fluid *is in the inverse ratio of the bulk of the brain*, and that with a large, well-developed brain we shall find but little subarachnoid fluid; whilst in the small, shrunk, and wasted brain, the accumulation of that fluid is considerable.

When the wasting, or shrinking, or collapse of the brain is partial,—limited to the region of two or three convolutions—a partial accumulation of fluid will take place in the situation of the shrunk part. A softening of a portion of the cerebral hemisphere will often cause a collapse of the convolutions above it, and thus space will be created for the accumulation of fluid.

3rdly. I think it may be laid down, that the accumulation of any large quantity of fluid in the ventricles, or the development of a tumour in the substance of either hemisphere, or the formation of a clot of blood there, is incompatible with the existence of a surrounding subarachnoid fluid. The pressure from within displaces the subarachnoid fluid, and prevents the secretion of it. Thus, we never find the two fluids, intraventricular and subarachnoid, existing together *in large quantity*; they may exist together *in small quantity* in shrunk, small, and ill-nourished brains, and more especially where the defective nutrition chiefly affects the hemispheres and the convolutions.

For these reasons I have long adopted the opinion, that the effusion of a large quantity of subarachnoid fluid is a result—and a result probably of a conservative kind—of the shrinking or diminished bulk of the brain from some cause; and that in no case does the accumulation of fluid around the brain cause compression of that organ, nor can it be regarded as a cause of coma.

Rheumatic and Gouty Coma.—Coma occurs in the course of rheumatic fever and of gout. The mode of invasion of the comatose state in these affections is very analogous to that of delirium, and very commonly follows that affection—always when it takes an unfavourable course. A patient may be going on well in rheumatic fever; he, however, suddenly becomes restless and uneasy, and falls into a comatose state, in which he dies. The late Mr. Abernethy has referred to three cases of this kind which proved fatal, and he states that he found no abnormal condition of the brain. His words are: "I may also mention, that I formerly examined the brains of three persons who died in a comatose state, in consequence of the metastasis of rheumatism. In these cases no morbid appearance was observed in the brain, except some slight marks of inflammation of the pia mater." These slight marks were, no doubt, nothing more than some increased vascular turgescence of parts of the membrane.

The following case shows that every form of cerebral disturbance, delirium, convulsions, and coma, may occur in rheumatic fever without any lesion of the brain which can be detected by ordinary means of observation.

Martha Mitchell, aged 34, was admitted on the 18th June, 1844, with rheumatic fever, the knees and ankles being the joints affected. On the 19th she became delirious; and a few hours afterwards she had a convulsive fit, succeeded by coma and death. At the *post-mortem* examination the brain and its membranes were found pale, but otherwise healthy. There were marks of recent pericarditis.

The occurrence of coma is more frequent in gout than in rheumatic fever, whilst delirium seems more frequently to occur in rheumatic fever. It is chiefly in the cases of chronic gout, in which the system is attacked pretty generally, that this state occurs, and the state of the kidneys is highly favourable to its development. Rheumatic fever differs from gout remarkably, as regards the extent to which the kidneys suffer. Although in both diseases these organs are much disturbed, and exhibit a considerable departure from their normal mode of action, in gout they are apt to suffer much in their nutrition. They shrink to one-half their natural size; the tubes lose their epithelium; serous cysts are developed; lithate of soda is found deposited in the tubes of the medullary portion. In persons who have long been victims of gout, whose joints are crippled, and the articular surfaces covered with a layer of lithate of soda, looking like plaster of Paris, this state of kidney is probably invariably present; and it is in such cases that we may generally expect the termination of gout by coma. Frequently the morbid state of the kidney is indicated by the presence of albumen in the urine, but it may exist without the escape of serum into the urine; the absence of that principle from the urine is, therefore, no proof that renal disease does not exist. The following case illustrates this form of gouty coma:—A gentleman's butler, about 50 years of age, had been the subject of several attacks of gout. He was admitted into the hospital in consequence of a copious effusion into one knee-joint; and his urine was found to be sufficiently copious, clear, and pale, with a small quantity of albumen. He suddenly became comatose, and died: and on examination we found a copious effusion of fluid into one side of the chest, which must have taken place a few hours before death, as I had satisfied myself by auscultation that no such effusion existed on the previous day; there were also very contracted kidneys; and the brain afforded no signs of disease.

It is possible, however, that sudden death by coma may take place where there is no evidence of the diseased state of the kidneys which I have described.

A gentleman, aged 35, a very nervous subject, the nervousness dating, according to his own report, from a mercurial erethism, which was brought on by a course of mercury for an ophthalmic disease. This gentleman was attacked with gout of the wrist and toes. He was treated by mild saline purgatives and small doses of the colchicum wine; this latter, however, appeared to increase his irritability, and I left it off after using it only twenty-four hours. I then gave small doses of morphia, under which he improved considerably; and on the 5th and 6th of September he appeared to be advancing quickly to convalescence. On the latter day I diminished the dose of morphia: at half-past twelve of that night he suddenly became comatose, and died in a few hours. Unfortunately, I was not permitted to examine the body in this case; but I can scarcely believe that there was any extensive disease of the kidney, as the man was young, and had not been subject to many attacks of gout.

This form of coma, which, for the sake of distinction, may be called *gouty coma*, is, doubtless, nearly allied in its essence to the epileptic coma, especially in those cases in which the kidneys are attacked.

Coma in Typhus and Erysipelas.—The comatose states which accompany typhus and erysipelas are too well known to render it necessary for me to describe them. The typhoid condition is really a more or less comatose state almost from the beginning; and the same may be said of erysipelas; and in both the increase of the state of coma must be looked upon as a most unfavourable omen. When it ends fatally, death seems to ensue from exhaustion, nor can any evidence be obtained of the existence of any active morbid process affecting the brain.

In like manner we have coma, in connexion with the exanthemata, both in the premonitory and in the secondary fevers. A patient who receives a large dose of the poison may become rapidly comatose under its influence, and before any eruption can make its appearance. I saw a case of this kind some years ago at a ladies' school at Hackney. A young girl had rigor and sickness, and within twenty-four hours became comatose. When I saw her she was lying on her back, breathing quickly, perfectly insensible, almost blue, and with a small rapid pulse. She died in a few hours afterwards. Scarlet fever was very prevalent in the neighbourhood at the time, and some cases of it had occurred in the school. Mr. Toulmin, who also saw the patient, agreed with me in attributing the phenomena to a large dose of the scarlet-fever poison, which rapidly prostrated the powers of life.

Coma likewise ensues in cases of anæmia from loss of blood, or from the imperfect formation of the blood, as in cases of chlorosis. Convulsions and coma precede death in animals killed by loss of blood. The state of syncope from loss of blood, or from debility of any kind, is the simplest form of this kind of coma; when bleeding is carried to a certain point, especially if the patient be in the erect posture, this state of insensibility comes on, and the patient remains in a comatose state for a

longer or a shorter time, and sometimes a slight convulsion occurs at the moment the faintness commences.

The sudden cutting off of a certain quantity of blood from the brain may produce the comatose state. A remarkable instance of this occurred to me in a case of which an account was published in the twenty-seventh volume of the Medico-Chirurgical Transactions. In this case the whole current supplied to the right side of the brain by the right common carotid artery was cut off by the sudden occlusion of that vessel, through the passage of a large quantity of blood between its coats from a fissure in the aorta, which gave rise to the formation of an extensive dissecting aneurism. The patient fainted at the moment of the occurrence of the laceration, and a drowsy, semi-comatose state was the most prominent symptom throughout his illness.

We have already seen that there is abundant evidence that delirium and convulsions may come on in cases where patients have suffered from loss of blood.

There can be no doubt that an inadequate supply of blood to the brain is likewise favourable to the production of a state of coma. The most satisfactory proof of this is afforded by the results of Sir Astley Cooper's interesting and most important experiments on ligature of the carotid arteries, and compression of the vertebrals in rabbits; and in some cases, ligature of the common carotid artery in the human subject has been followed by coma.

Lastly, I may refer to the coma which is produced by the introduction of certain poisonous agents into the system, either through the digestive organs, or by their direct injection into the blood.

Alcohol swallowed in large doses is capable of producing a state of coma very rapidly.

But the most remarkable form of coma, of this kind, is that produced by opium. A person poisoned by opium in large dose falls into profound coma, and lies just as if the insensibility were produced by compression of the brain,—snoring, and evincing no sign whatever of sensibility; and yet, when the brain is examined, there appears no evidence whatever to justify the supposition that the brain did suffer compression, or that it was the seat of any active morbid process, such as inflammation.

So, also, when chloroform, or ether, or other substances of the same class, are inhaled, the patient passes quickly into coma, the degree of which can be regulated exactly by regulating the quantity of vapour to be inhaled. Yet, on examining the brain after death from an undue quantity of chloroform, no morbid appearance is found which can refer the comatose phenomena to the influence of pressure, or to any active morbid process.

These are among the best marked examples of the toxic coma, produced by the direct introduction of poisons, and they may be regarded as typical of the coma which arises from the introduction of other narcotic substances; as Indian hemp, belladonna, &c.

I have now detailed the principal facts deserving of our attention in the clinical history of delirium and coma. The analogy between the circumstances under which delirium occurs, and those under which coma takes place, is a fact of the highest interest and importance, and must be kept strictly in view in any attempt to devise an adequate theory of the pathology of these states.

From what I have stated we learn the following facts:—

1. That delirium and coma may be produced by the introduction of certain poisonous agents into the blood, either directly or through the digestive organs.

2. That a deteriorated and poisoned state of the blood is favourable to the production of delirium and coma; as in the cases of rheumatic and gouty delirium and coma, and of the delirium and coma of typhus, erysipelas, and the exanthemata.

3. That the same state or states of the brain which are favourable to the production of epileptic convulsions are favourable to delirium and coma.

4. That the anæmic state, or that state of blood in which the colouring matter is very deficient, is favourable to the production of delirium and coma.

5. We learn that compression will produce coma, but not delirium.

And lastly, that in all these cases the delirium or the coma may occur in their highest states without the slightest evidence of any inflammation of the brain or of its membranes.

I take this opportunity of correcting the quotation made from Dr. Watson's lecture at the close of the last lecture, which, although it expressed his meaning, was not cited with perfect accuracy.

Alluding to cases of delirium supervening on rheumatic fever, Dr. Watson says:—"Such cases are, in fact, spoken of as cases of metastasis to the brain. It may sometimes be so,—nay, I know that it sometimes *is* so,—but not often."

In quoting Dr. Watson, I did not mean to adduce his high authority in support of the doctrine of metastasis. The last two words of the passage quoted showed, as I think, that he only admitted it as the rare exception to a very general rule. But, finding myself tempted by all that I had seen, and by what I could glean from others, to dogmatize that the delirium of rheumatic fever *never arises* from rheumatic inflammation within the cranium, I allowed myself to be checked by the opinion of one whose views I have the best reasons to respect, and which are justly held in the highest estimation by the Profession at large.

Dr. Watson has, indeed, adduced very strong evidence in favour of the views which I advocated, and this so long as fifteen years ago, in a Clinical Lecture delivered by him at the Middlesex Hospital, and printed in the sixteenth volume of the *Medical Gazette*. This lecture he has reprinted in the second and third editions of his valuable Lectures on the Practice of Physic.

I extract the following remarks from a note with which Dr. Watson has favoured me:—

"Many years ago (he says) a female patient of mine, who had rheumatic fever, and subsequent cerebral symptoms, died in the Middlesex Hospital, whither she had been sent, if I rightly remember, by Mr. North. Upon examination of her brain, we found unequivocal pus smeared over its hemispheres.

"It was the recollection of this single case which led me, in lecturing, to affirm, perhaps too positively, the occasional but unfrequent metastasis which you are inclined to deny.

"It is possible,—nay, I now think it probable,—that this concurrence of rheumatic inflammation of the joints with inflammation of the membranes of the brain may have been merely a casual coincidence."

ORIGINAL CONTRIBUTIONS.

ON SOME CASES OF CANCER OF THE SKIN.

By B. PARTRIDGE, Esq., F.R.S.

Of cancer there are various forms, the most common of which is scirrhus or carcinoma, well seen in the breasts of women, as consisting of a grey homogeneous mass, with fibrous striæ radiating through it, and containing oval, circular, or elongated cells, with granules or nuclei within them. The other kinds are, the encephaloid and the colloid or reticular, but it is to the first mentioned that I shall direct your attention, it being the variety which most commonly affects the skin. Other kinds do, however, occasionally occur in this part. I have, on the table, a specimen of disease of the great toe, in which the skin alone is affected, being changed into a dirty white tuberculous mass. In the Museum of King's College there is a preparation of a melanotic tumour, from the side of a middle-aged woman, involving only the skin.

Any part of the integument may become affected, but in those localities where it borders on mucous membrane, as the mouth; in those in which the skin is particularly sensitive, delicate, or highly vascular; in those parts where the skin has much cellular fibrous tissue lying beneath, as the scrotum; and in those where it is generally exposed to irritation, as the lips and foreskin, we see malignant disease usually manifest itself.

Cancer of the Lip.—This begins usually in the lower lip, either as a small, firm, hard tumour in its substance, or with a superficial ulceration and scab. These scabs are flat, round, dirty-looking, and from their sides, after a time, exudes an ichorous discharge of pungent stimulating matter. The scabs, in the first stage, frequently fall off and are renewed.

Carcinoma of the lip may occur at an early age, but generally at or after the middle period of life; it sometimes happens in young persons, but I do not remember seeing a child affected by it. And here I would premise that doubtful cases may often be satisfactorily diagnosed by the effect which escharotics and stimulants have upon them; for these, when they affect only the surface of the disease, injure the cancer, while they do good to ulcers. A man lately under my care had a chronic ulcer of the tongue, thought by some to be malignant, but it healed up under the application of nitrate of silver. This disease is more common among men than among women. The usual exciting cause is local irritation. In the lower classes it is said to be often *caused* by the clay pipes which they smoke. This, however, cannot be received as a true explanation, when we consider the immense number of those who smoke, and the comparative infrequency of cancer of the lip, for it is not so common in this part as in the genital organs. There is at present a man in the house, in whom the disease commenced on the left side of the mouth, with which he had been accustomed to smoke; it generally commences on the opposite side. It may, however, occur in persons who do not smoke, and then often originates from the irritation of biting a warty tumour on this part. I have lately had under my care a case of this kind. A young lady was frequently in the habit of biting and picking a small chapped fissure in the centre of her lower lip; the consequence was, that it took on a malignant aspect. It was cured by removal. It may be stated, as a rule, that irritation serves to excite the disease in a particular spot only when there is a previous cancerous diathesis. It is not made out that this predisposition is shown, or that it can be recognized in an individual. Cancer of the lip is rarely accompanied with a similar disease in another part of the body. As the disease progresses it ulcerates, and spreads towards the skin, eating away portions of the lip, and forming firm, large, tuberculous projections, with a peculiar spreading, overhanging surface. The discharge is thin, dirty-looking, watery, and pungent; often so sickly and offensive, that the attendants are unable to remain long in the room. There is at present a woman in a small ward at Middlesex Hospital, with cancer of the genitals, with a discharge so foul, that the nurses could hardly be prevailed upon to attend to her. This has to a great extent been got over by ventilating the room with Clarke's blower, which has proved very useful for this purpose. The labial and submaxillary absorbent glands enlarge as the disease spreads over the chin and upper lip, and the bone sometimes becomes affected.

Death takes place from exhaustion consequent on the inability of the patient to take food, or on hæmorrhage. In the case of the late Professor of Botany at King's College, the disease had been apparently removed, but it returned in the lip, the glands became ulcerated, and he died fram hæmorrhage.

The rapidity of progress varies much in different individuals. If they be of melancholic temperament, and the constitution be impaired, its extension is rapid; if the general health be good, and the temperament of the patient quiet or cheerful, the progress is slow. In the neighbourhood of mucous membranes, especially about the anus and lip, the progress is more rapid than in other parts, in some of which it may continue for many years. I had under my care an old woman labouring under a scirrhus ulcer, commencing from a wart below the umbilicus, which she picked into a sore the size of a shilling. I determined on not removing it; in the course of two years it had only increased to the size of half-a-crown. The severe pain which she suffered was readily allayed by remedies.

Syphilitic ulceration has been mistaken for cancer, but may be diagnosed, among other methods, by the influence which mercury possesses over such sores, as well as the benefit which follows from the

application of black wash and nitrate of silver to their surface, which we have before stated to injure a cancerous ulcer. In psoriasis labialis, the lip often becomes thick and inflamed, but its chapped and scaly appearance readily distinguish it from the first stage of malignant growth. The same means of diagnosis may be applied to these diseases when affecting the eyelids. A short time since, I had under my care a patient suffering from an ulcer of the eyelid, with sharp defined edges. This was soon cured by the exhibition of mercury,—showing its syphilitic origin. Again, cancer and lupus may be mistaken for each other. The former begins usually in one pimple, around which it spreads; the latter in many spots, which run into each other by ulceration.

Removal by the knife is the treatment attended with the greatest success, as well as the least pain. Escharotics, if preferred, are less objectionable in any part of the body than in the lip. Arsenic has been in great repute, but it is not well to employ it, as it becomes absorbed into the system, and your patient may be poisoned. As a local application, chloride of zinc, mixed into a thick paste, with flour or marble in equal proportion or more dilute, is decidedly the best. It is well to begin with the weaker mixture, which should be spread on lint, and applied over the part. It causes very severe pain. In a few hours it should be removed, and the part washed and poulticed. An old gentleman applied to me with a cancer of the nose, which had been incompletely excised, and had consequently returned. Finding that it could not be cut away without removing a considerable portion of the organ with it, I determined on using the chloride of zinc, and the patient completely recovered, with comparatively little loss of substance.

The plan recommended by the French surgeons is the application of lint, which has been soaked and thickened by maceration in nitric acid. The adjoining surface of the skin should be previously protected. It has this advantage, that it causes but a momentary pain, whereas, the zinc causes pain for many hours.

Should the knife be resorted to, do enlarged glands connected with the disease forbid the operation? Not if they be removable, otherwise it is better to leave the cancer alone, unless it be of small size, and growing very rapidly. There is, at present, in the hospital, an Irishman, whose lower lip is extensively diseased; below his chin are several firmly adherent enlarged glands. I have, therefore, thought it advisable not to operate.

The operation for its removal is performed by some with a pair of curved scissors, but this proceeding is not usually adopted in England, unless much of the lip is diseased in a lateral direction. The best plan is by a V shaped piece, cut out sufficiently large to include the whole of the cancer, the great gap thus formed is readily closed and kept together by harelip pins, with the twisted suture of thick thread. Formerly the suture was placed upon a silver canula supposed to be less irritating; but a common needle, with a lancet-shaped edge, tempered so as to be a little flexible, answers equally well. The needle should not be passed through the mucous membrane, but down to it, so as to insure pressure on the vessels which lie close against it. This generally proves sufficient to prevent hæmorrhage.

As wounds in this neighbourhood rapidly unite, the needles may be removed about the third or fourth day. If the gap be very large, it will be better to remove them later and not all at once, and the part must then be supported with straps of plaster, or an interlacing bandage. In some cases a gap is left at the lower part of the wound forming a salivary fistula. This, if small, is easily closed by keeping a sponge against the inner extremity of the opening, and applying escharotics, or the actual cautery externally.

Is the result sufficiently satisfactory to warrant the removal in this manner? My own experience leads me decidedly to recommend it, for I think that the cure is more frequent than the return of the disease. Some, however, as Travers and Cruveilhier, speak of it as so hopeless that they doubt the propriety of the operation. But it is well known that this, as well as in other parts, the effects of the disease are staved off by the operation, and often for a considerable time, in those cases where a cure is not effected.

Carcinoma of the Penis.—Malignant disease of the penis is generally cutaneous, and rarely assumes any other than the scirrhous form. Its ordinary site is either the prepuce, frænum, or glans. It usually begins on the interior of the prepuce, spreading thence to the glans, or appears simultaneously on these two parts. Persons with congenital phymosis are seen most frequently to suffer from it. Out of nine cases related by Hey, seven had phymosis. The secretion which collects under the foreskin acts as a powerful exciting cause. Jews are said never to have it, and the same is probably true of the Mohammedans. It is also said to be less common among barbarian than civilized nations.

It almost always occure after the middle period of life. A case at present in the Hospital, and on whom I operated a short time since, forms an exception to this rule. During the progress of the disease the foreskin becomes thickened, œdematous, and tender; there is an ichorous discharge, and red excrescences peep out from the orifice of the foreskin and turn over its margin, or the disease ulcerates through the skin.

The same rules for diagnosis which have been mentioned above, in speaking of the lip, will apply to this locality. There is, however, another disease with which it may be confounded. Warts may be recognised by the chinks which dip between them down to the skin on which they grow. The space from which they spring by pedicles is small, compared with the extent of their surface. They are often dichotomous. They are readily got rid of by simple excision or by escharotics.

When removing a malignant growth from the surface of the penis you must examine carefully whether the corpora cavernosa be involved; if so, the penis should be amputated behind the disease, leaving as much of the healthy structure as possible, in order that the penis may be left of sufficient length for impregnation to take place, which it has been known to do in such cases. Previous to paring the surface an instrument should be introduced into the urethra to guide the operator, that he may avoid opening this canal. Some have proposed the removal of the penis by ligature. Its advantage is the prevention of hæmorrhage, and it may be advisable in some few cases; but such have not come under my own observation. He relates a case where, in consequence of the repeated hæmorrhage, he was obliged to tie the penis, and apply styptics. I had a case in which the slight use of the actual cautery was necessary. The bleeding, which is chiefly from the veins, usually stops without difficulty. The arteries requiring ligatures are the two dorsal, the arteries of the corpora cavernosa, and one in the urethra.

When the amputation is done near to the pubes it is necessary, on account of the retraction of the penis, for an assistant to hold this organ with his fingers or a pair of forceps, either before or after an incision has been made through the skin. As the skin is abundant and readily adheres to the stump, it is not necessary to apply sutures, if this be done the urethra must be slit up.

A troublesome consequence of this operation is stricture of the orifice of the urethra, which some endeavour to overcome by the use of a flexible catheter, introduced after the operation, but this often causes much irritation without being productive of benefit. The best plan is that recommended by the late Mr. Earle, of Bartholomew's Hospital, namely, the slitting of the lower part of the urethra, turning out the corners and uniting them by a stitch on either side to the adjacent tissues. If a stricture form, a bougie must be used, or, still better, a metal stilleto which can be introduced by the patient himself. Is the presence of enlarged glands in the groin a valid objection to the operation? One of Hey's patients had had escharotics and stimulants applied to the penis, which irritated and inflamed the glands in the groin. The penis was, however, amputated, and the swelling subsided. Two other cases in which the glands were removed did well. I have followed the same practice with success. Some of the gentlemen present may remember a case of a man with enlarged glands in both the groins, which were removed at the same time as the penis. The wounds healed favourably, and when I saw the man, many months after, there had been no return of the disease. There are cases in which the glands in the pelvis are enlarged, and the penis so affected that we cannot remove all the disease, and yet amputation is justifiable even in these, when the organ is so enlarged and the discharge so profuse as not only to annoy, but to threaten the rapid destruction of your patient. It must not be followed in old persons, in whom there is a cancerous predisposition, and who may have other organs affected.

There are various reasons which appear to prove that cancer is not contagious. Women, as you are aware, are very subject to malignant disease of the womb, and their husbands often continue to have connexion for a long time after the disorder has manifested itself, and yet I do not remember a single case in which the husband was similarly affected. There is another fact which also seems to contradict this supposition, namely, that the discharge from cancer, when affecting the womb and upper part of the vagina, drops down and is for a long time in contact with the lower wall, yet the disease does not become developed in this locality, but extends around the part it first attacked.

HOSPITAL REPORTS.

ST. BARTHOLOMEW'S HOSPITAL.

SCIRRHUS OF THE BREAST—REMOVAL AT AN EARLY STAGE.

Under Mr. STANLEY.

There are few things which attest more incontrovertibly the rapid march of surgery than the treatment of these cases in our day, compared with the melancholy picture it offers us when we revert to a bye-gone age. Fifty years ago, as a rule, every surgeon recommended, and but few practised, the removal of scirrhus at an early stage. The consequence was, that but few cases recovered; the patient was worn down before consent could be obtained to operate; the glands in the axilla and neck often affected, having to be dragged down by ligatures, and dug out by the fingers or the handle of the knife; and the operation was frequently regarded by the boldest and most enthusiastic surgeons as offering but a very indifferent chance of success. They did it more from a desire conscientiously to fulfil their duty to the patient, than from any sanguine hopes of success, and the generally fatal result really justified this desponding view.

But owing to increased faith in surgery among our patients, the relief from suffering obtained by chloroform, and increased accuracy of diagnosis, cases are now constantly treated in their early stage by the knife; thus really giving the patient a fair chance of recovery, and offering the surgeon some stimulus to operate.

The case on which Mr. Stanley operated to-day was one of these. The patient, a woman, was not emaciated, nor did the disease seem to have begun those devastating ravages on her health and strength which it is sure to commit, sooner or later, in its progress; but she was not strong. The lump, Mr. Stanley stated, had only made its appearance ten or twelve weeks previously, and must, therefore, have been in its infantile stage. The nipple was not retracted, nor much skin adherent over the tumour. The lump itself was quite small, the ominous features in the case being its extreme hardness; its steady growth resisting all treatment, and her age, which was forty, that period which so often calls into play all the destructive tendencies of the constitution. Mr. Stanley, therefore, decided for the operation, which was done in the usual manner.

The patient, having her eyes bandaged, was brought in, and the chloroform was administered. Mr. Stanley then removed the mammary gland and the growth by means of two elliptical incisions, which included a portion of the skin lying round the nipple and above the gland; but little blood flowed, and the patient was removed, having to all appearance not suffered any pain.

The operator, on examining the removed mass, showed the gentlemen present that the growth was

really schirrus. It was not above the size of a walnut, and was seated on the mammary gland. It was circumscribed, as was, in all probability, the morbid action which produced it, for the tissues immediately around seemed quite healthy, so that the case, of which we shall report the ultimate termination, offers a fair prospect of success.

CHIMNEY SWEEPS' CANCER.—EXTIRPATION.

Under Mr. STANLEY.

The next subject for operation was a man above thirty, of the middle height and strongly built. He had that peculiar, earthy, freckled cast of countenace which is supposed to indicate a tendency to purulent deposits, the worst forms of scrofula, &c. In such a man a surgeon might fear that a bubo would slough, and a chancre take on phagedænic action. A close analogy might be traced between this man's physical organization and that of the woman operated on for cancer, and the unhealthy hue of his countenance was still more strikingly seen when under the influence of chloroform. He was, however, to be operated on for a chimney sweeps' cancer; a disease for which, like the former, there is no alternative but immediate and unsparing excision of every part at all tainted. The portion affected was the lower part of the scrotum, of which the structure was invaded for about three inches in circumference, and weighing perhaps about two to three ounces, as near as we could determine from handling the mass after removal. In the centre of this was an exceedingly foul ulceration, extending nearly across the entire breadth of the scrotum, exuding a fetid, thin, watery discharge. The edges were raised and everted, and numerous indurated spots were distinguished in the surrounding integuments. It was sore to the touch, but otherwise painless. On either side was an enlarged, but not indurated, inguinal gland; his general health was unaffected.

The history of the case is pretty much in accordance with the received opinion as to its growth and progress. The patient, a sweep and a man of temperate habits, first noticed it some six years ago, when it commenced as a wart on the right side of the scrotum; this he scratched off, and the surface scabbed over; he pulled the incrustation off, and the present foul ulceration gradually followed. The same series of morbid phenomena took place in several spots, which finally coalesced into the one foul ulcer. It had increased more rapidly during the last twelve months. No treatment had been adopted.

Operation.—The patient having been placed under influence of chloroform, and the penis grasped and drawn up, Mr. Stanley made an incision on the left side of the scrotum, from the upper and lateral part down to the rupture of the perinæum, keeping quite clear of the diseased parts. A similar incision was then made on the right side, and the two were united by a transverse incision, which passed with a curve immediately below the penis; the isolated portion was then dissected off; the cut edges were drawn over the testicles, brought into apposition, and firmly united by stitches; and the patient was removed, still labouring under the influence of chloroform, very little blood having been lost during the operation.

At first sight it would appear that the portion of scrotum left after such an operation is quite insufficient to cover the testicles, and that the stitches would speedily cut through the skin, and the admission of air into the cavity be followed by extensive suppuration, and the surgeon's hopes be blighted; but practice tells us that the scrotum becomes, in course of time, capable of covering the testicles, and admitting of their free movement.

A TUMOUR IN THE ARM—DIFFICULTIES OF DIAGNOSIS.

The next case which engaged attention was that of a man of strong limb, and apparently good health. The operation in itself was trifling enough, but the nature of the case worthy of notice, both in a practical and pathological point of view.

The history of the case, which extends over a period of three years, is interesting. He was lifting a basket containing 50lbs of meat, when he in some way stretched his arm, and immediately felt a crack in the elbow. Three days afterwards the arm swelled considerably, and some signs of inflammation appeared; but lotions, &c., in the course of a fortnight, removed all pain and redness, leaving only a slight swelling on the side of the elbow. As this remained small and painless till about seven weeks ago, he took no notice of it; but at that time it began to increase, and since then he has had pricking and shooting pains in it. The symptoms now noticed are, a tumour the size of an egg, about an inch above and anterior to the inner condyle of the left arm. It is difficult to diagnose; the fluctuation is not evident; and it has some of the characteristics of a solid growth. To decide the matter, Mr. Stanley plunged a bistoury into it, when out sprung a large hydatid, followed by a few smaller ones, and some pus. Mr. Stanley, in his notice of the case, said, adverting to the difficulty of diagnosis, that this was, in all probability, a case of a hydatid cyst, which had gone on to suppuration. He saw a case lately in which the patient suffered from a similar swelling on the bend of the forearm, and which was pronouced by a surgeon of high standing to be the cyst of an old abscess. In this case, when the swelling was opened, portions of a substance very like broken up brain came out; it was also of very long standing. Now, can it be, that in these cases an approach is made to the formation of a real abscess, and that this being arrested, absorption is not set up, but instead of it a new action, somewhat allied to inflammation, which goes on to the formation of hydatid cysts or of this cerebriform matter?

UNIVERSITY COLLEGE HOSPITAL.

FIBROUS TUMOUR OF THE UPPER MAXILLA (EPULIS).—OPERATION.

A female, aged *56*, admitted April 29. She is of spare form, and has rather an anxious countenance, but apparently is in fair health. Ceased to menstruate ten years ago. Has lost nearly all the double teeth, and many of the single ones are much decayed. States that her teeth have been a great source of trouble for the last four years.

Five years ago the patient noticed a prominence of the upper gum, at the fore part of the mouth, above the two middle incisor teeth. At that time those teeth were sound and not painful. The swelling gradually increased in size; and it was painless till about eight months ago. Within the period last mentioned the size has been augmented rapidly; and pain arose when any hot fluid touched it. During the last five months she has been in the habit of applying a couple of leeches to the tumour at intervals of four or five weeks; and the resulting loss of blood has afforded her relief.

The upper lip is protruded. The tumour occupies the place of several teeth,—that of all the incisors. It is smooth upon the surface, very firm to the touch, and uniform upon the surface, *i.e.*, not divided into parts or lobes. It is closely connected with the subjacent bone by a broad base. Most of the teeth in the neighbourhood of the disease are decayed and broken off, only the stumps remaining; and two of these are imbedded in the sides of the tumour.

The patient being in the sitting posture, and under the influence of chloroform, the tumour was removed with a pair of cross-cutting pliers, after the bone had been divided vertically on each side of it with a small saw.

Upon examination of the piece removed, the bone where incised was found healthy. The tumour was fibrous in texture and very solid. The periosteum, and the bone from the posterior margin of the alveolus were continued upon it blending with the accidental growth, which might properly be said to issue from the interior of the bone. The stumps of two teeth were found imbedded in it.

The structure and connexions of this tumour were obviously very different from those of the lobulated, vascular, and bleeding mass removed a little time ago by the same Surgeon, from the side of the lower maxilla of a young female.

UNUSUALLY LARGE HYDROCELE, COMPLICATED WITH SCROTAL HERNIA.

The patient, John G., aged 44, who had left the hospital, returned to show his present condition; but, before this is described, it will be well to give a brief history of the case, as communicated by Mr. Briggs, the house-surgeon.

About eighteen years ago the patient noticed in the right groin a swelling, which descended from the belly during the day. For the support of this, which doubtless was a hernia, a truss was used; but, the enlargement became gradually augmented in size, in so much, that when unsupported, it reached the scrotum.

Twelve years ago, or thereabouts, the patient received a slight injury by accidentally striking the testis of the same (right) side against an iron chair. He suffered severe pain at the time for a couple of hours; and, in about six months after, he observed, that when the original tumour was returned into the abdomen, there was still a swelling in the scrotum the size of a fist.

Having found at this period that a sense of weight and uneasiness, which he felt in the part, was relieved when the truss was removed, he discontinued the use of this apparatus.

In two years from the date of the blow upon the scrotum, the swelling was tapped by a surgeon, and about a pint of chocolate-coloured fluid was drawn off. About six months afterwards the operation was repeated. From that period till J. G. was admitted into the hospital no treatment was resorted to,—the mass having been merely supported with a sling of suitable breadth fastened upon the loins. Meanwhile the mass became gradually so large, that for several years he has been obliged to have his coat made in a peculiar way to conceal it.

When he first came to the hospital, the swelling extended a considerable distance down the thighs, and its circumference was as great as that of a full-sized man's hat,—measuring twenty-one inches around. The penis was not perceptible, but its position was indicated by a puckering of the orifice of the prepuce, and the organ was felt embedded in the left side of the swelling. The greater part of this was elastic and fluctuating. Upon the right side it was covered largely with bowel in a hernial sac.

The treatment.—The hydrocele has been tapped three times by Mr. Quain, at intervals of about six weeks and two months between the operations. On the first occasion, *seven pints* of dark coloured, serous fluid were drawn off, and without means being taken to effect a radical cure. In the second operation, four pints of lighter coloured fluid were removed, and one pint in the third. After the two latter operations, tincture of iodine mixed with water (in the proportion of one part to two in the former, and equal parts of both fluids in the latter) was injected, and the injection was suffered to remain in the tunica vaginalis. The effect of the injection was aided, after inflammation had subsided, with long adhesive straps firmly applied.

The result has been in every way satisfactory. The patient suffered in no degree from illness after the operation, and scarcely at all from pain; and now, after the lapse of several months, his condition is as follows:—There is no deformity; the scrotum, on the whole, is larger than natural, but much the greater part of the present bulk is found, upon close examination, to be attributable to the condition of the skin, which, having been for many years exceedingly stretched, has not yet resumed its natural size. The tunica vaginalis is but little thickened. In fact, this structure is not easily recognised by the touch; it is less so, than the sac of the hernia. The bowel, which had been almost constantly during several years in the scrotum, is now retained in the abdomen with one of Nicoll's wire-spring trusses.

CEPHALHÆMACELE.

This term was incidentally mentioned by Mr. Quain, in his Clinical Lecure, as probably less objectionable than "cephalbæmatoma," which is commonly used to distinguish the same morbid condition after nægele. The concluding portion of the latter composite word sounds somewhat equivocal.

The following case was among the out-patients:—Upon the left side of the head of a child, born a couple of days ago, is an oblong, elastic swelling, situated upon the anterior part of the parietal bone, and measuring about two inches in length by one in breadth. Upon the corresponding part of the opposite side is another swelling, similar in its nature, but of much smaller dimensions, being only about half an inch in diameter. There is no ecchymosis

or discoloration of any kind upon either side. Pressure being made with the finger over the surface, it is manifest that the bone is entire, that no communication, therefore, exists between the fluid of the swelling and the cranial cavity. The large tumour is limited at its edge, and nearly all round, with a very small but distinctly perceptible rim.

A solution of the hydrochlorate of ammonia (one drachm to half a pint of water) was ordered to be kept applied warm. In a week, the swellings were no longer perceptible; and where the larger one had been, the bone was more distinctly felt than elsewhere, being also, in a slight degree, rough to the touch. It seemed as if the thin superjacent soft parts were here more intimately adherent one to the other, and to the bone, than elsewhere.

The nature of the morbid condition in such cases was illustrated in Mr. Quain's clinical lecture, by the dissection of a case met with at the same time, and presented to him by Mr. Buchanan. The child, in this instance, died some days after birth, from disease altogether unconnected with the cephalhæmacele. The swelling consisted of blood; and this was lodged beneath the pericranium, between the membrane and the parietal bone, in which, be it added, there was no disease or defect. The ridge limiting the tumour at its circumference was very distinct. It was completely osseous, and was intimately connected with the pericranium, and the bone growing in fact from the latter.

KING'S COLLEGE HOSPITAL.

DISEASE OF THE ANTRUM.

Since the publication of Mr. Stanley's very excellent work on diseases of the bones, medical men have had the opportunity of forming much clearer diagnoses of the nature, prognosis, and treatment of some of the more obscure affections of the osseous tissues. The importance of the clear perception of the nature of diseases of the antrum is well shown in the case we are about to relate, as well as in one published some time since by M. Gensoul, to which it was similar. In the latter, the soft tissues had been divided with the intention of removing the superior maxillary bone, when an instrument was thrust into the cavity and a quantity of yellow fluid issued out, showing that excision was unnecessary.

The patient to whom we now more particularly refer, was admitted into King's College Hospital on the 23rd March. She is twenty-six years of age, of delicate appearance, and has suffered from trivial ailments, together with severe headaches. Since her marriage, eight years ago, she has had one miscarriage (the first) and four children, the youngest of which is five months old. She dates her present complaint from August, 1849, when a swelling formed in the right cheek, in the situation of the antrum, about three quarters of an inch away from the ala of the nose. It came on imperceptibly without any pain, and when she first noticed it, it was the size of a pea, immovable, and not painful when pressed. Since this time it has gradually increased, but more rapidly of late. On her admission the projection of the tumour on the cheek was the size of half a hen's egg. Its surface was smooth, and it distended the skin, which was quite healthy, drawing down the lower eyelid. The finger passed into the mouth detected the tumour, pressing down the exterior of the alveolor process, nearly to a level with the teeth; and the right half of the hard palate, instead of the usual concavity, presented a smooth almond-shaped convexity, an inch long, and half an inch wide between the median line and the molars and bicuspids of the same side. On pressure, which gave the patient pain, there was a feeling of fluctuation, and an elastic, tense sensation, with a crackling as of thin bone. When firm pressure was made, the teeth felt as if forced down; they were mostly carious. The zygomatic muscles had been so stretched as to become paralysed, and, on smiling, the right corner of the mouth was drawn downwards and outwards, the triangularis oris alone acting. The most yielding part of the tumour was in the situation of its first appearance.

When the woman was brought into the operating heatre, and placed under the influence of chloroform. Mr. Fergusson, for the purpose of ascertaining with certainty the nature of the disease, plunged a trochar and canula into the tumour between the cheek and the alveoli. On the trochar being withdrawn, a quantity of brown, viscid, glairy fluid, containing numerous flakes of cholesterine issued out. The point of the instrument was readily turned about in every direction. After withdrawing the canula, a portion of the wall of the sac was cut out, so as to give free exit to the remainder of the fluid. Mr. Fergusson stated, that the woman had been sent up from the country for excision of the upper jaw, for what appeared to be osteosarcomatous disease of that part. He had been unable to examine and make up his mind as to the character of the disease; the woman objecting to anything being done until the time for operating had arrived. The general roundness and smoothness; the equal expansion in every direction, as well as the peculiar feel of the wall of the tumour, had, however, led him to doubt the osteosarcomatous nature of the swelling. The case well showed the importance of resorting to any lesser operation which might prove sufficient before proceeding with the major one. Such a rule he would advise the younger surgeon especially to follow, as it would, perhaps, save him from annoyance and disgrace. Though the result of the examination might have disappointed those present, the disease which had been discovered was infinitely rarer, and by so much the more interesting, than those which required excision. But one other case of this kind had come under his notice, the preparation of which is in the King's College Museum. The portion of the wall of the tumour which had been cut out, was thin and flexible, from an insufficient deposit of earthy matter.

When we saw the woman, on Tuesday last, the swelling was decidedly less, there had been a constant discharge of glairy fluid, which, during the last few days, had diminished in quantity. She felt no pain, and had had no unfavourable symptom.

Mr. Stanley, in the chapter on membranous cysts of the antrum,(a) relates two similar cases, one under Delpech, the other under Mr. Lawrence, in St. Bartholomew's Hospital. He considers them to be consequent on injury, or that they grow from the fang of a carious tooth, as was probably the case in the present instance,—all the teeth on that side being carious.

ST. GEORGE'S HOSPITAL.

ABSCESS IN THE HUMERUS.

This occurred in a patient of Mr. Cutler's, who had suffered for fourteen years from a sinus in the upper part of the right arm, which ordinary applications had been unable to cure. The wound was small, and a probe introduced into it appeared to grate against some exposed bone. It was therefore determined to lay the part open and remove any portion of necrosed bone that might be found. For this purpose the soft tissues were cut through very carefully, on account of the proximity of the artery, and the trephine twice applied. The second portion of bone cut out by this instrument was ulcerated, and formed the wall of an abscess. The interior of the shaft was very carefully examined, but no loose bone could be found. The notes were, therefore, stuffed with lint, and water dressing applied. By this treatment, though no necrosed bone was removed, the matter which formed in the bone would have a ready vent, and the part would present a more healthy surface for the process of reparation.

ELEPHANTIASIS OF THE SCROTUM AND PENIS.

On the same day, Thursday, May 3rd, another case was brought into the theatre, of which a short account was given in the *Medical Times* a few weeks since, when the man had his hypertrophied prepuce removed. It was then thought possible, that, upon the taking away of this source of irritation, the œdema of the scrotum and rest of the penis might subside to some extent. Such, however, had not been the case, though the part had healed kindly. The œdema and thickening of the skin appeared to have extended further over the pubes, and the scrotum seemed larger. Its size varied considerably with change of position. Mr. Cutler had, therefore, determined on removing the scrotum, which was done by making two lateral semi-lunar incisions, commencing close to the under part of the penis, and continued downwards and backwards, on either side, to the perinæum, where they met. The skin and subjacent areolar tissue were dissected off close to the tunica vaginalis. Several vessels, from which the bleeding was profuse, required tying, and the portions of integument left at the sides were drawn together, so as to envelope the testicles, and secured in this position by interrupted sutures. The areolar tissue was infiltrated with a sero-albuminous fluid, and of a pearly-white colour. Mr. Holl informed us, that the meshes of this tissue appeared, under the microscope, to be larger and coarser than natural. The fluid was more opaque, and thicker than ordinary serum.

The cause of this kind of elephantiasis, which is most common in the upper and lower extremities, and in the external genital organs of the male and female, is very obscure, and, though sometimes apparently traceable, as in this instance, to some local irritation, (the man having suffered from frequent clap, phymosis, and his employment that of a postilion,) seems to require some constitutional predisposition for its development; for the same so-called exciting causes occur repeatedly without producing any such result. In its nature, it is, doubtless, a low form of inflammation, distinguished by the absence of its usual sequelæ, as ulceration and suppuration.

In the Museum of St. George's is a specimen of an enormously hypertrophied prepuce, removed by Mr. Cutler, on a level with the glans penis. The disease originated about four years before his admission into the hospital, and was connected with abscesses in the scrotum and fistula in the perinæum, consequent on urethral stricture. The scrotum was enlarged as well as the prepuce. The man had congenital phymosis, causing difficulty in the introduction of an instrument for the dilatation of the stricture. After removing the prepuce, a catheter was readily passed, and the fistula, in the course of time, healed without any lessening of the scrotum. He left the hospital for change of air, and the scrotum was subsequently removed, the man recovering well. The largest on record were, one removed by Clot Bey, weighing fifty pounds, and one, still larger, in a Chinese, operated on by the late Mr. Aston Key.

REMOVAL OF A FATTY TUMOUR.

Mr. Hewitt subsequently removed a small fatty tumour from over the right deltoid of a woman. This, though a simple operation, Mr. Hewitt observed, presented points of interest. When the woman first applied at the hospital she had some degree of œdema of the face and ankles, which rendered it probable that she might have disease either of the heart or kidneys. He had, therefore, thoroughly examined the heart, the sounds of which were normal and some of her urine was also carefully tested with heat and nitric acid, but no indication of renal disease could be detected. He was, therefore, justified in operating. The necessity of these precautions being taken is shown by the not unfrequent occurrence of death from secondary purulent deposits, even after the slightest operations. Even the tying of piles was sometimes followed by this untoward result. He had lately examined two persons who died from this cause, and in both he had found the kidneys diseased. This he believed to be the explanation of many of these cases; he therefore considered it advisable, in any instance where there was a doubt, to examine those organs with the greatest care.

(a) Stanley on the Bones, p. 300.

FARRINGDON GENERAL DISPENSARY AND LYING-IN CHARITY.

CONGENITAL FUNGOID DISEASE OF EYELIDS AND LACHRYMAL GLAND.

This case, of which we can find no other on record, occurred at the Farringdon Dispensary, under the care of Mr. Samuel Griffith, who has favoured

us with a sight of the preparations, which are, at present, in the Museum of King's College.

The subject of the disease was the second child of a woman, aged 26. No history of hereditary predisposition to malignant disease could be traced either on father's or mother's side. Several of the mother's relations have, however, died from phthisis. The other child, aged 18 months, is alive and healthy. There were no symptoms of uterine disease in mother either before or after delivery, she is a very strumous subject, and has suffered much from enlarged glands and abscesses in the neck, which, left her when she became pregnant, and she remained healthy up to her confinement.

The child, born without difficulty, was found to have a tumour, apparently involving the left eye, and obliterating all trace of the eyelids. It was about the size of a hen's egg, overlapping the outer margin of orbit; soft and elastic, covered with highly vascular, though otherwise healthy skin. It grew rapidly, the skin ulcerated, and there was a discharge of fetid pus, with occasional copious hæmorrhage. The glands of the neck became enlarged, and several hard, nodulated, subcutaneous swellings formed in various parts of the body. The child suffered little during the first week, but afterwards severely, from the size and consequent tension of the tumour. This also prevented it sucking with the right breast, and it had much difficulty to do so with the other. It died, when four weeks old, with convulsions, probably brought on by weakness from the profuse bleeding and insufficient supply of milk. Mr. Griffith was unable to make the *post-mortem* and casts until the fifth day after death, when the tumour, which previously was full half as large as the child's head, had shrunk considerably.

Post-mortem.—The body was much emaciated, the tumour, involving the parotid and cervical glands of the left side, extended upwards over margin of orbit, inwards to the nose, outwards to the ear, and downwards nearly to the shoulder.

Its anterior surface was ulcerated and coated with clotted blood. At its inner margin was a fissure (visible only after the shrinking of tissues, formed by the ciliated margins of the eyelids, lined with mucous membrane) which led down to the eyeball. The eye, nerve, muscles, and all the other parts in the orbit, as well as the bony case, were healthy. The only trace of the lacrymal gland that could be discovered was formed by a small portion of the tumour, having a glandular appearance, which dipped in the orbit at its outer margin. The tumour, when cut into and under the microscope, presented the usual characteristics of encephaloid disease, and was readily separable from the surrounding structures. It would appear to have grown from the gland, extending thence into the eyelids.

The substance of brain was healthy, but projecting into it from the left frontal bone was a growth like a small mushroom.

The lungs and heart were healthy.

The abdomen was large and hard.

The liver studded throughout with masses of malignant deposit, was afterwards injected; the injection readily entered all the healthy structure, but very sparingly into the diseased portions. As the liver was partly decomposed, very little force could be used. This viscus weighed 7 oz. 6 dr.

The mesentric glands were considerably enlarged, and the upper part of the left kidney showed a considerable mass of diseased deposit. All the other organs were healthy.

The appearances which this disease presented under the microscope were similar to those ordinarily seen in malignant tumour of this class. Though medullary disease of the eye and orbit is not uncommon in young children, yet we have been unable to find any record, nor have several friends, of whom we have made inquiry, been able to furnish us with any history of a case occurring congenitally. Children are more liable to it than adults; for Bichat states, that more than one-third of the patients operated on by Desault for cancer of the eye were under twelve; and out of twenty-four cases mentioned by Scarpa twenty were under twelve. The places in which malignant disease most usually attack men, are the lips and the genital organs, while, in women, it chooses the mamma and uterus.

It is interesting to observe, that though, in the case above related, the vascular, sensitive, and, moreover, chapped nipple of the mother was constantly exposed to the discharges from the tumour for nearly a month, yet she exhibited no trace of the disease. Nor was the uterus, which Mr. Griffith carefully examined, otherwise than perfectly healthy.

LA CHARITE.

TUMOUR OF THE LOWER JAW—RESECTION.

Le Gras Marguérite, labourer, 31 years of age, admitted Feb. 8, 1850, under the care of M. Velpeau. On the right half of the lower jaw there is a tumour about the size of a small hen's egg. In front it extends as far as the canine tooth, and backwards to the commencement of the ascending ramus of the jaw. Vertically it occupies the entire thickness of the bone. There are not any teeth in the part thus diseased, but the traces of their sockets still exist. The tumour is very hard, not yielding to pressure in any direction; its surface is smooth and regular. Its base appears intimately adherent to, and continuous with the bone. The skin is not discoloured, but the mucous membrane covering the tumour is somewhat livid and reddish, not presenting the rose colour of the neighbouring parts. In the point corresponding to the centre of the alveolar margin, there is an excavated ulcer, admitting the end of the little finger, and of considerable depth. By pressing the tumour, a little sanious, muco-purulent fluid exudes by this ulcer. The diseased growth is the seat of severe, lancinating pains, with periodical exacerbations. They irradiate towards the ear and chin. There were not any enlarged glands under the jaw.

The tumour had been two years in growing to its present size, Marguérite referring its origin to the extraction of two carious teeth on that side of the lower jaw. The pain did not cease after the operation, and the socket, instead of closing, became permanently painful. The tumour soon after commenced growing, and continued to make progress, although for some time but little notice was taken of it, nor were any remedial measures adopted, until it became the seat of severe lancinating pain. A surgeon, who was then consulted, ordered mercurial inunction, and the internal use of iodine of potassium, which failing to be of service, the man entered the hospital.

Feb. 9.—M. Velpeau practised the resection of the lower jaw. He made a curved incision in the direction of the digastricus, extending from a finger's breadth below the ear to the chin, along the lower edge of the jaw. The flap was dissected from below upwards, the facial artery tied, and the tumour completely isolated; the bone was then sawn across, and the operation terminated by the section of the buccal mucous membrane behind. The integuments were then brought together, and secured by two points of the twisted suture, and the wound dressed simply. The man bore the operation well, although chloroform was not exhibited.

The examination of the tumour showed that the external tissues were hypertrophied and indurated; the mucous membrane especially was much thickened, and, as it were, fibrous in some parts. When divided in its length, the bone was found to be changed to a mere shell, with very thin and fragile parietes; the osseous substance was dilated eccentrically, and did not partake in the degenerescence. This bony shell contained a medullary, gelatiniform mass, ulcerated in its centre, which was greyish, and sanious, and communicated with the opening which existed in the alveolar margin of the tumour. This yellowish mass could be easily torn; yet, possessing some degree of consistence, was surrounded by a more dense fibrous membrane, separating it from the bone, to which it was not adherent. There were not any traces of the organs of the dental canal in the tumour; but the canal, with its nerves and vessels, was discovered on its posterior surface. Under the microscope, M. Robin found that the diseased mass presented the form and aspect of colloid tumours; but it did not contain any cancerous cells, and was characterized by fibres of fibro-plastic tissue, intermingled with fibres of cellular tissue.

Slight inflammatory reaction followed the operation. On the fourth day, the dressings were raised and changed; suppuration was commencing. A few days afterwards he had an attack of bronchitis; nevertheless the wound went on well and diminished in extent. On the twelfth day after the operation, considerable hæmorrhage took place from the lower angle of the wound, the blood spirting out freely in arterial jets. Some trouble was experienced in discovering the orifice of the hæmorrhagic vessel among the granulations, but it was at last found and a ligature placed on it, when the bleeding immediately ceased.

On the 6th of March there was only a small fistulous canal remaining, communicating with the mouth. The patient had begun to take solid food. The fistula was closed a fortnight after, and there was then only an ulcerated surface to be healed. In a few days more Marguérite left the hospital, at which time there was a slight diminution in the transverse diameter of the inferior oval of the face, the chin being drawn back, downwards, and a little to the right. The left cheek was flattened, but the right projected. The cicatrix was hardly perceptible in its upper fourth; lower down, it occupied the bottom of a deep groove, at the junction of the neck and jaw, and was concealed by the beard. The tongue had not lost its mobility, and the articulation was scarcely interfered with.—*L'Union Médicale.*

PROGRESS OF MEDICAL SCIENCE.

IRELAND.

[Dublin Correspondence.]

The fate of the Medical Charities' Bill, to come before the House on Friday next, engrosses the entire attention of the Profession in Ireland at present; the chief points have been discussed, of course, over and over again, the general impression that it will be of much service. No little speculation settles on the point, whether the centre of superintendence is to be mixed up with their mightinesses of the Poor-law Board; or, as suggested by you, be more of a strictly medical character. The latter, I need scarcely say, would be more grateful to the Profession. The rate-payers, of course, resist the Medical Board as having too much control, though the sealed orders of the Commissioners are often in not less unsavoury odour with them. Doubtless, Sir W. Somerville has solved the puzzle before this. Another obvious difficulty presents itself in the position of some of the present hospitals, which, from locality, obligations from old grants, legacies, &c., seem to a certain extent disabled from being "district hospitals;" and which, from their great usefulness, it would be impolitic to disturb to any extent; these, it has been suggested, should be brought under a special clause, entitling them to the same insignificant sum out of the Consolidated Fund as at present, and the same amount now from Poor-rate as of old from Grand Jury Cess, with, of course, their income from legacies, foundations, &c., undisturbed. The grant to that most valuable institution, the Cork-street Fever Hospital, is already trembling in the scale. Erected in 1804, with a sum of 8,000*l.* collected from the citizens, in aid of a Parliamentary dole of 1,000*l.*, it has done wonders for the sick poor of Dublin. Its present subscrip-

tion from the citizens is only 110*l.*! The Government, instead of making good the deficiency, threatens to blot out this fine establishment altogether. The last report of the Board of Supervision in Scotland states that Government gave 10,000*l.* in aid of medical relief in that country, the sum expended last year amounting to 33,000*l.*, equal to 3d. a-head on the entire population. The *tu quoque* is not always, perhaps, the most correct mode of arguing, yet in this instance we may be allowed to say that our Irish Medical Institutions should not be so pinched by those in authority. It is wonderfully fine to appeal to the sympathies of the public, as has been done of late. Some of that large sum laid out hitherto on the pile of brick buildings on Cork Hill could not be better laid out than on the hospitals of Dublin.

ACTION OF ARSENICAL REMEDIES.

Among the more interesting papers of the Dublin Surgical Society of late, we may signalize one by Geoghegan on the effects of arsenic. In connexion with a very curious monograph lately by Gibert on the same subject, and the rather extending use of this agent in medicine, we may, perhaps, allude to it. Geoghegan's observations have been confined to the use of arsenic in over doses. In 97 cases of poisoning that have occurred in Ireland, 72 have been by arsenic. In 16 fatal cases brought under his notice, he found vascular injection of the intestine—ecchymosis or colouration in all—extending to the submucous coats in 5, to the peritoneal in 2. He found erosion of the mucous membrane in one-fourth of the cases, ulceration in none; diminished adhesion of the coats very common, with thick, turbid, effused contents of the vessels, so familiar in such examinations, Geoghegan thinks arsenic acts by producing a profound disturbance in the molecular constitution of the blood, a disturbance extending to various parts of the system in a way yet unknown. The direct or primitive effect in a medicinal point of view is the diminutive of this. We have then, first, excitement of the mucous membrane, with quickened and increased excretion, removing something from the intestinal follicles, producing diarrhœa and tenesmus, so common after arsenic; then follows its action on the nervous and circulating system, a point laid much stress on by Rasori, and accounting for its extensive use among Continental practitioners in bronchial affections and those of the skin. Gibert traces the use of arsenic down from the time of Dioscorides and Avicenna, both of whom used it extensively in pulmonary affections—"abscess and asthma"—and all kinds of skin diseases. Albucasis was, perhaps, the first, and Fowler the last, that brought the medicine into great note.

Some quacks in India, it seems, knew its great value, from whom Fowler took the hint. Stoerk, a little after, denied its effects. However, both in Germany and Italy, up to the present, the name of Fowler is well known, and the solution very extensively used in pulmonary affections and skin diseases. Brera tried arsenic in fevers with the best possible effects, and without those effects so commonly ascribed to it. Moscati tells us the Illyrians and Dalmatians use arsenic commonly in the form of fumigation in asthma! Harles, in a singular essay, speaks most highly of it in neuralgia; Martin Solon still later of it in dropsies; Hoffmann in epilepsy. Beddoes looked on it as quite invaluable in phthisis and scrofula; Des Granges in these diseases and mesenteric affections. With this mass of evidence in its favour, we are not to wonder at the use of arsenic being so general, especially under the form of "Donovan's Solution" in skin diseases, and that of Fowler's in fevers. Gibert tells us that in the latter it is given most extensively in France by Biett and his disciples, the effects hitherto having been very much exaggerated. Orfila lays much stress on the fact of arsenic passing into the blood and acting on the kidneys, and Geoghegan on the peritoneal surface of the liver being liable to a peculiar deposit. He also speaks of a singular yellowish-white deposit, consisting of crystals of phosphate of magnesia and ammonia, evidently a *post-mortem* result, as likely to puzzle the practitioner not a little. The isomorphous character of phosphoric and arsenic acids may, perhaps, explain this deposit, as well as the comparative harmlessness of both those compounds—points to be remembered in practice, as well as the innocuity of cacodylic acid, so peculiar in its action and composition also.

THE STETHOSCOPE IN PNEUMONIA.

A somewhat elaborate paper by Dr. H. Kennedy was read at the Surgical Society on the 6th inst., in which the Author sought to establish the two following points:—1st. That in no stage or form of pneumonia is respiration entirely absent. 2nd. That in some cases of pleuritic effusion, respiration over the lungs continues after the fluid has accumulated to such an extent as to give complete dulness, on percussion, from top to bottom. Allowing for the great accuracy of Dr. Kennedy's ear, perhaps the points are scarcely open to discussion. The larger bronchial tubes remain open, of course, and various sounds travel round a mass of effusion. For all practical purposes, however, we too often meet cases where the respiration is completely null, at least, in the more vital parts of the lung, and hepatisation all but universal over a particular part of the chest. In effusion, also, the grand fact is too often obvious, that we can hear nothing.

In the discussion that followed the reading of the paper, the exact value of the stethoscope in all such cases was discussed, an impression prevailing in the Society that we trust too much to it. As admirably remarked by Benson, however, the wisest course is to consider *both* the physical signs and rational symptoms,—the former leading us to a correct diagnosis; the rational symptoms, on the other hand, our only guide in the far more essential matter of treatment and regimen.

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THE MEDICAL TIMES.

SATURDAY, MAY 18, 1850.

DIFFIDENT and timid, with the sword of Damocles suspended by a hair above their heads, the Apothecaries' Society advance their rights in a moderate, if not a supplicating tone. Whilst confessing the inherent incapableness of their Institution, they appeal to their laborious exertions as an administrative body, to dignify and utilize their office, as their best claim to the consideration of the Legislature. They admit that the statute is imperfect, cramped in its powers, exclusive, and unsuited to the duties it was framed to carry out,—duties which their own strenuous labours have imposed upon it, until they have become the necessity and the justification of its future maintenance. The Apothecaries' Society accepted the duty of elevating the status and qualification of the Medical General Practitioner, and they have done it worthily. Their admirable conduct justifies the claim that the control over the education and examination of the General Practitioners shall be in the hands of members of their own class. The experience of the last thirty-five years incontestably proves the expediency of the practical enforcement of this proposition. To depart from it will be to nullify the past, to ignore and rescind present advantages, and to throw back the Profession to that state of anarchy, ignorance, and social degradation in which it was prior to the year 1815.

When, therefore, the Society say, that "they look back upon the public good which they have been enabled to effect with the highest feelings of pride and satisfaction," there is not one man in the Profession who will venture to insinuate that their self-complacency is not justified by their acts. The question, however, follows,—how are the powers that have been so usefully exercised by the Society of Apothecaries to be carried out in the future arrangements of the Profession? The Society evidently think that their own institution may be so modified as to accomplish all that is possible, if not all that is desired by the General Practitioners of this country. They "are prepared to lay before the Secretary of State such suggestions for the amendment of the Act as would, in their opinion, go far to remove the objections that exist to its provisions, and would, at least, remove many of the impediments in the way of a satisfactory settlement of the complicated question of medical reform, not only as regards England and Wales, but the kingdom at large."

It is obvious that the Society desire to be endowed with powers to qualify candidates for practice in Scotland and Ireland, as well as England and Wales; but in that case the constitution of this body must be radically changed, and its character raised to a level with the status of general practice throughout the Empire. Its *title* must be altered no less than its constitution, for we must assure the Society that the Profession at large will consider it no honour to be admitted, as apothecaries, to the privileges of this Institution, however eager they may be to acquire a right to practise, a claim at law for payments for medical service, and protection from the unlicensed depredations of quacks and impostors.

The design which the Society have thus evinced, may be attended with beneficial results; but, until their scheme be more distinctly propounded, we shall not dogmatically pronounce a decision. The powers which they now exercise, although only the seminal germs of such a jurisdiction as we think the General Practitioners ought to be endowed with in order to secure due protection of their interests, we will never calmly consent to see either abrogated or superseded for doubtful advantages. Our objects are to increase the authority, influence, and dignity of the Profession, to advance the social rank whilst we strengthen the material interests of our brethren, and to bring all classes into closer accord, and more friendly communication than now prevails; and, any policy that tends to accomplish such ends shall have our cordial support. If the Society of Apothecaries believe that they can contribute to the fulfilment of this mission, and are preparing for it, they must understand that nothing but a thorough reform of the Institution, adapting it to the existing conditions of general practice, will suffice.

METROPOLITAN INTERMENTS BILL.

A STORM of indignation against this measure has been rehearsed at the Craven Hotel. A Member of Parliament thundered, church-

wardens blustered, overseers foamed with wrath, and undertakers let fall tears of silent sorrow. We suppose, that due notice will be given of a more public performance of the melodrama; and, in the meantime, it may be worth while to advert to one or two of the alleged objections to the proposed Act. It has been said, that it is "likely to tax the people to an enormous extent;" that it "outrages private feeling in a manner that is disgraceful to a civilized country;" that, "whilst powers are given to compensate the clergy of the Established Church, for the vast body of Dissenters, who have some vested rights in burial-grounds, no compensation is proposed;" and that it is "an invasion of parochial rights." If by parochial rights be meant the powers of the churchwardens, the present legal custodians of the vaults and grave-yards of our churches, we admit the truth of the charge, and we heartily rejoice that there is a prospect of an end being put to their "right" to countenance the continuance of such revolting scenes as have lately been brought to light. It was but the other day, that public attention was called to the state of the "churchyard vaults" near Foster-lane, at the back of the General Post-office. In a letter which appeared in the *Times*, signed "Waller Lewis, M.B., Cantab," the following statement was made, and has not been contradicted:—"The contents of each coffin that retains its horizontal position are exposed to view; but, in many, this is not the case, the coffins having completely fallen to pieces, and the human remains lie scattered about, black and rotting." It seems, that occasionally these vaults are cleared out for fresh interments, and the contents are then shoveled into a room only partly underground, having a large opening directly under the windows of the infant school of one of the neighbouring parishes. It is in this manner that the churchwardens prove how unnecessary it is that Government should interfere with "the control of parties over their own cemeteries." We have taken the last objection to the Bill first, because it is the only one which has any foundation in fact. There is not the slightest probability of the people being taxed to "an enormous extent." The tax authorised by the Bill cannot exceed a penny in the pound, and it is by no means certain that any assessment will be necessary. We have, in a former Article, adverted to the groundlessness of the fear, that the officers appointed under the Act will have power to remove corpses, or to interfere in any manner in funerals against the wishes, or without the consent of the survivors. There is as little foundation for the assertion, that the compensation of Dissenters has not been thought of. The 33rd section of the Act makes it compulsory on the Board of Health to compensate "all persons" interested in such non-parochial burial-grounds as may be affected by any order for the discontinuance of interment. The truth is, that the opponents of the measure, while they denounce it as a "gross job," are thinking of the many snug little jobs to which they must bid a final adieu, if the Bill be allowed to pass. *Hinc illæ lachrymæ!*

Let us, however, in conclusion, offer a word of consolation to the poor undertakers. In the City of London, the stronghold of jobbery, they have found a champion in Mr. Common-councilman Taylor, who takes up the omission of compensation to these lugubrious gentlemen as a weapon in the furious onslaught made by him against this "most atrocious" of all Bills. But we fear that his valour lacks its better part—discretion; and his acquaintance with the old statute-book seems to be on a par with his knowledge of the real contents of the new measure, than which "a more despotic act he never knew." We, therefore, refer Messrs. Feathers, Staves, and Co., to the Bill itself, and they will, we are sure, be glad to find that there is nothing but the uncompelled exercise of the common sense of the public to prevent their driving as thriving a trade as formerly. If they think this a case for compensation, we must borrow a phrase from the London *gamins* to express our sympathy; and we say, with all the sincerity which usually accompanies the words,—"We wish they may get it."

Since the above lines were written, a struggle has taken place between the opponents and supporters of the Bill. The undertakers, believing that "the first blow is half the battle," made a dreadful onslaught on a meeting of the supporters of the Bill, convened under the presidency of Lord Robert Grosvenor at the Whittington Club, on Monday last. The barriers were forced—the lights extinguished—the benches upset, and the reporters with them—the ladies frightened into fits—the platform invaded—the Chairman ejected—the room cleared in the twinkling of an eye. It was a clever *undertaking* altogether, but the worthy perpetrators thereof will soon learn that they have merely driven a nail into their own coffin. Might is not right in this country.

THE FLEMISH TWINS.

The Flemish twins, of whom an account appeared in our Number of July 14, 1849, p. 26, have lately died, exhausted by marasmus. The autopsy showed, that, as Dr. Verhalghe had stated during their life, the two peritoneal cavities communicated; so, also, as predicted in our own brief remarks, at page 32 of the same Number, the livers were found united by a species of prolongation from their middle lobes, which was about half an inch in thickness. This was the only communication of the abdominal viscera, but is sufficient to negative completely the idea of an operation for the severance of such twins.

THE MEDICAL STAFF OF THE NEW COLNEY-HATCH LUNATIC ASYLUM.

The magistrates for the county of Middlesex have just announced the plan upon which they intend to organize the Medical Staff of the Colney-Hatch Asylum; and as we are going to press we have received a small *brochure* by Dr. Stone, entering a protest upon the part of the Profession against the proposed arrangements. It appears that this establishment, which is to contain 1000 patients, is to be provided with only two resident Medical Officers, who are to combine the anomalous qualifications of Physician and Apothecary, and perform all the responsible duties of superintendence, for the poor stipend of 200*l.* per annum. We cordially agree with Dr. Stone, that the county magistrates are committing a fatal error. For such a salary they will not find such Medical men as ought to preside at Colney-Hatch; and besides which, an establishment of such magnitude requires a much larger medical staff.

DEATH OF M. GAY-LUSSAC.

We have to announce with regret the death of M. Gay-Lussac, member of the Institute, and one of the most celebrated chemists of the French School. He died last week, from an affection of the heart, and was buried on Saturday last with the greatest pomp.

BIBLIOGRAPHICAL RECORD.

A Manual of Elementary Chemistry, Theoretical and Practical. By George Fownes, F.R.S. Third Edition. Pp. 605. London. 1850.

[The Profession owe a debt of gratitude to Dr. Bence Jones. To him they are in a great measure indebted for this third edition of a most excellent work, to which we shall, ere long, more particularly allude. We cannot, however, in this place refrain from extracting the following pleasing but far too modest advertisement which Dr. Bence Jones has appended to the work:—

"The correction of this edition for the press was the daily occupation of Professor Fownes, until a few hours previous to his death in January 1849.

"His wish and his endeavour, as seen in his manuscript, were to render it as perfect and as minutely accurate as possible.

"When he had finished the most important part of the Organic Chemistry, where the most additions were required, he told me he should 'do no more'—he had 'finished his work.'

"At his request, I have corrected the Press throughout, and made a few alterations that appeared desirable in the only part which he had left unaltered,—the Animal Chemistry."]

A Practical Handbook of Medical Chemistry. By John E. Bowman. London. Pp. 259. 1850.

[The Demonstrator of Chemistry in King's College has produced a very able manual of instructions for the examination and analysis of urine, blood, and other animal products. The Work also contains directions for the detection of poisons in organic mixtures and in the tissues; and is rendered more valuable for having been revised by Professor Miller. The wood-cuts are numerous and good; and we recommend it as a valuable text-book, and one of great utility, both to the Medical Student and Practitioner.]

A Treatise on the Climate and Meteorology of Madeira. By the late J. A. Mason, M.D.; Edited by James Sheridan Knowles. To which are attached a Review of the State of Agriculture and of the Tenure of Land, by George Peacock, D.D., F.R.S., &c., Dean of Ely, &c. &c.; and an Historical and Descriptive Account of the Island, and Guide to Visiters; by John Driver, Consul for Greece, Madeira. London and Liverpool. Pp. 388. 1850.

[This is a long title, and includes many things. It is with Dr. Mason's part of the work that we have chiefly to do; and this is a valuable addition to our treatises on climate. The meteorological tables have been carefully kept, and are well arranged. They may be consulted with advantage by all interested in such inquiries. It does not, however, appear to us that this work has added anything to our knowledge of Madeira. The author's broken health, and his unfortunate choice of a house in a confined, damp, and unhealthy situation, may account for the querulous tone of his remarks. There are "beccos," or lanes, in Funchal as dirty as in London, and a Portuguese ox-driver will rival a London cabman in unharmonious vociferations; but, neither circum-

stance will annoy any one who exercises a little discrimination in the selection of his lodgings. The author also complains bitterly of the cloudy skies, and the moist atmosphere of Madeira. The winter of 1833—34 was unusually damp; but Dr. Ross informs us, from his experience of twenty years' residence in Madeira, that a peculiar clearness of the air, and a bright and cloudless sky, are among the most remarkable characteristics of that health-giving climate. It is quite true that the hygrometer detects a considerable degree of humidity in the air, but owing to the equable high temperature of the atmosphere around Funchal —the average of the year being 64 degrees Fahrenheit—the watery particles are held in so fine a state of solution as rarely to descend in the shape of fog or mist. It is this that gives such healing powers to the climate, and renders it so suitable a sanatorium for persons labouring under many forms of pulmonary disease. There are, however, cases of phthisis, complicated with a relaxed condition of the system which would probably be benefited by a drier air, and this Medical men ought to bear in mind.

We may add that the Dean of Ely has contributed many interesting particulars relating to the soil, agriculture, and tenure of land in Madeira. Mr. Driver's contribution consists partly of historical narrative, and partly of very spirited and truthful descriptions of various parts of the island. His lists of prices are carefully and correctly drawn up, and his advice as to the voyage and choice of lodgings well worthy the attention of any one meditating a visit to Madeira.]

On Diseases of Menstruation and Ovarian Inflammation, in connexion with Sterility, Pelvic Tumours, and Affections of the Womb. By E. J. TILT, M.D., &c. Pp. 250. London. 1850.

[This is a valuable addition to our literature of the uterine system, the receipt of which we now merely acknowledge, proposing, at an early period, to review the work. Dr. Tilt, we may however mention, is decidedly opposed to the plan of removing mechanically certain obstructions in the Fallopian tubes. On this point we entirely agree with him; and we cannot refrain from now entering our protest against that over-meddling pruriency of our age, incessantly, and on the slightest occasions, fingering, examining, probing, and *speculating* those parts of the tissues of the *sexus sequior*, sacred to Venus alone, and the chosen priests of the *Ienis Elithya*. Truly, of this and other matters, it might be said, in the words of the Bard of Soracte,—

"——— Quid nos dura refugimus
Ætas? *quim intactum* ———
Liquimus. ———."

Ode xxxv. 34.]

A Physician's Holiday; or, a Month in Switzerland. By JOHN FORBES, M.D., F.R.S. Second edition, revised and corrected. Pp. 350. London, 1850.

[It is seldom that a large edition of a book, modestly professing to be little more than a guide to travellers in Switzerland, should so soon be exhausted. Such, however, is the fact;—a solution of which is only to be found in the high moral character and professional reputation of the Author. There is a quiet fascination about Dr. Forbes, whether we behold him as the Practitioner, see him occupy the chair of Aristarchus, or view him as the Author, only to be appreciated by those who enjoy the honour of his friendship. The charm of the man, interwoven naturally in the production of the writer, claims this tribute of our feeble praise; and we conceive that we do not exceed our duty when we call the attention of those of our Professional brethren who have not the happiness of his personal acquaintance, to the study of the mind of one whose every act and deed express in the purest form, the *beau ideal* of the accomplished Physician.

The first edition of this work was reviewed in our pages; to that review we have only to add, that the present edition has been carefully revised and corrected, and some of the Swiss songs done into English verse. We think the National Anthem — Dem Vaterland—might have been better rendered than as it appears in the Doctor's pages (53). Let us try our hand:—

"*Rufst du, mein Vaterland?*"

"Call'st thou, my Fatherland?
We vow with heart and hand
To do thee right.
Still hast thou sons as brave
As stemm'd the battle's wave
When our Saint's guardian glaive
Flash'd in the fight.

"Though impious foes may climb
Yon alpine heights sublime—
Thy rampart wall—
We stand—a living rock—
Blenching before no shock;
Danger for thee we mock,
Joyously fall.

"Shout we our battle-cry,
Free will we live, or die,
Free! ever free!
Free as our mountain air,
Like TELL'S our course, we swear,
On, ever on, and ne'er
Backward shall be."]

The Treatment of Secondary, Constitutional, and Confirmed Syphilis, by a safe and successful Method; with Numerous Cases and Clinical Observations, &c. By LANGSTONE PARKER, Surgeon to the Queen's Hospital, &c., Birmingham. Pp. 112. London. 1850.

[The favourable manner in which a former work by Mr. Parker on syphilitic diseases was received by the Profession, fully entitled him to make a second appearance on the same subject. This time he has produced a something new—a new mode of treatment. It consists in what the author calls "the mercurial vapour-bath." A preparation of mercury—generally the bisulphuret, the grey oxide, or the binoxide —is converted into vapour by means of a spirit-lamp, while the mercurial vapour is applied at the same time through the medium of aqueous vapour to all parts of the body. It will, of course, require long experience to determine the rank which this new method may be entitled to assume; for the present we can only say, that the thirty-two cases carefully recorded by the author afford very strong evidence of its intrinsic merit.]

On the Identity or Non-Identity of Typhoid and Typhus Fevers. By WILLIAM JENNER, M.D., Professor of Pathological Anatomy in University College, London, &c. Pp. 102. London. 1850.

[The readers of the *Medical Times* are already acquainted with the principal part of Dr. Jenner's views on this long-disputed question. It is, however, one of such importance, and the work of Dr. Jenner is one of such sterling value, that we shall not hesitate to examine both completely at a future period.]

On the Principles of Health and Disease: An Inaugural Dissertation of the University of Edinburgh. By DAVID NELSON, M.D., Physician to the Queen's Hospital, Birmingham, &c. Pp. 113. London. 1850.

[Another production from the Birmingham school. It is an unpretending, yet well-written work, apparently published for the purpose of demonstrating, that the Author was not unworthy of the Hospital and Collegiate appointments conferred on him so soon after graduation. Dr. Nelson has attained the object, if, indeed, it were the one which we have supposed. Though not containing anything very novel or striking, his work is a plain and clear *exposé* of the present state of our knowledge, relative to the causation of disease.]

An Arctic Voyage to Baffin's Bay and Lancaster Sound, in search of Friends, with Sir John Franklin. By ROBERT ANSTRUTHER GOODSIR, late President of the Royal Medical Society of Edinburgh. Pp. 152. London. 1850.

[Mr. Henry Goodsir, brother of the Author, had embarked with Sir John Franklin in 1845. As year after year wore on, and no intelligence from the absent arrived, Mr. Goodsir's brotherly affection prevailed over every other consideration, and he started, on the 17th of March, 1849, as surgeon to the whaler Advice, in search of his lost relative. The whaler penetrated as far as the entrance to Barrow Strait; a glimpse of Prince Leopold's Island was caught from the mast-head, and the "water sky" seen far beyond indicated the existence of open sea; but the master of the vessel did not think it prudent to push further in, and our Author was forced to abandon his enterprise at the very moment a portion, at least, of its object was on the point of being attained. There is nothing Medical in the present work; but its perusal will afford an hour's agreeable relaxation after the toils of the day. It is written in a clear, simple manner.]

Pathological Researches on Death from Suffocation, and from Syncope, and on Vital and Post-mortem Burning. By SAMUEL WRIGHT, M.D., Professor of Clinical Medicine in Queen's College, Birmingham, &c. Pp. 34. London. 1850.

[This is a most learned and able dissertation on several points raised, at and connected with, the trial of Mary Newton, at Bridgnorth, which has been already noticed in the *Medical Times* of August 18, 1849.

The main points to be decided were, whether the deceased had died from suffocation or from a violent cause, and whether the burns observed on her body were vital or *post-mortem*.

Dr. Wright first points out the *post-mortem* appearances which attend death from suffocation, and shows that they are sufficiently characteristic. They cannot, for example, be confounded with those accompanying death from the products of combustion, which is, in fact, a sedative poisoning.

In a subsequent chapter, Dr. Wright refutes Dupuytren's opinion relative to the coincidence of congestion of the heart with sudden death from shocks to the whole nervous system. In five cases which fell under the author's observation, and in all those which he has collected with great care from authors, emptiness of the heart was a leading phenomenon.

Dr. Wright likewise establishes, that vital burning in a healthy subject is never unattended with the red blush round the burn, or with a peculiar congestive coloration underneath it. The former may sometimes be absent, the latter never. When vitality is extremely low, the characteristic redness may be wanting—as in collapsed cases of Asiatic cholera, &c.—but in healthy subjects it is always observable.

As to the existence of serum in the blisters of *post-mortem* burns, Dr. Wright does not absolutely deny the possibility of such an occurrence. It will depend entirely on the amount of organic life remaining in the tissue experimented on, or, in other words, on the nature of the death. On amputated limbs Dr. Wright has often produced *true* blisters in from half a minute to four minutes and a half after amputation. Beyond this latter period the vesications are gaseous.

In the only case in which the Author had an opportunity of testing the matter on the human body he produced a serous blister with the spirit lamp three hours and a half after death, while the body was yet quite warm; yet neither around nor underneath the blisters was there the least shade of redness. Three well-executed plates accompany the present volume, which, as a text of reference, is most valuable, and reflects much credit on the Author.]

Outlines of Qualitative Analysis, and Laboratory Practice. By Dr. SHERIDAN MUSPRATT, F.R.S.E. London. 1850.

[Liverpool is peculiarly fortunate in possessing so excellent a teacher of Chemistry as Dr. Sheridan Muspratt, whose reputation will be increased by the publication of this useful set of tables. They are admirably got up, and a great boon to the chemical student, to whom analytical maps of a simple and comprehensive character have hitherto been a desideratum. A useful table of chemical equivalents is appended to the little volume, which we strongly recommend.]

Hints on Infection. By T. J. FLETCHER, M.R.C.S.L. Pamphlet. Pp. 30. Bromsgrove.

[Mr. Fletcher supposes all infectious diseases to depend on some subtle matter, resembling ordinary

gases, introduced into the system; and that fever, cholera, small-pox, &c., arise, each of them, from the presence of their own peculiar gas. His *modus medendi* is to remove the patient from the influence of the poison, or to purify the air by chlorine.

The pamphlet, we presume, is merely intended for local circulation.]

The General Malaria of London and the Peculiar Malaria of Pimlico Investigated, and the means of their Economical Removal ascertained. By ANDREW URE, M.D., F.R.S. Pamphlet. Pp. 39. London. 1850.

[We believe Dr. Ure to have been unfairly treated in the Kenilworth-street affair, and that Prussian blue *did* actually exist in the mud of that fatal sewer. There can be no doubt that gas lime refuse is a source of malaria, and the sulphuret and cyanide of lime which it contains a potent cause of disease and death. We shall have occasion to allude to the Kenilworth-street tragedy in a future article on Hygiene; meanwhile Dr. Ure may reconcile himself to the opposition with which his views have been received, by the conviction that through his agency one of the hitherto unknown and secret sources of destruction and death has been brought to light. To be forewarned is to be forearmed.]

Revelations of Egyptian Mysteries. With a Discourse on the Maintenance and Acquisition of Health. By ROBERT HOWARD, Practitioner of Medicine. Pp. 276. London: Colburn. 1850. 8vo.

[We shall take a very early opportunity of reviewing this work. Meanwhile some of our readers will perhaps kindly inform us if Mr. Howard is really "a Practitioner of Medicine," and entrusted with the care of patients.]

Observations on Asiatic Cholera; and Facts regarding the Mode of its Diffusion. By T. SIMPSON, M.D. Pp. 168. London. 1850.

The Cholera; What has it taught us? By WILLIAM J. COX, M.R.C.S., L.S.A., M.C.S. Pamphlet, pp. 26. London. 1850.

[There is more than one work now going through the Press which professes to lay before the Profession the history of the last cholera epidemic. When these appear, we shall have an opportunity of reviewing the many publications we have received upon the subject. For the present, suffice it to say, as regards the two books that head this notice, that Dr. Simpson's "offers to the public certain presumptions and facts in proof of the doctrine, that Asiatic cholera is a contagious disease, depending for its existence on an animal poison;" while Mr. Cox's is a plain statement of facts of treatment, from which he endeavours to deduce "a true *methodus medendi*," namely, that by Calomel. We agree, with Mr. Cox, in considering opium as a poison in Asiatic cholera; but we entirely dissent from his assertion, that Dr. Ayres's plan is the "true *methodus medendi*." As to Mr. Cox's dogma, that "the treatment of disease, to be successful, must be rational"—the time perhaps may not be far distant when his own success in life shall have proved to him the contrary.]

On the Operation for Strangulated Hernia. By HENRY HANCOCK, F.R.C.S.E., Surgeon to the Charing-cross Hospital, &c. London. 1850.

[There are few diseases respecting the proper treatment of which so many opinions prevail, as strangulated hernia. Scarcely a single point of the process for the relief of the stricture which has not given rise to a multitude of conflicting doctrines or a variety of operative proceedings. Mr. Hancock has, therefore, conceived that some utility may arise from "eliciting opinion as to the best mode of operation, as well as the general treatment to be adopted in cases of strangulated hernia." Following up this idea, he has laid the principal points fairly and clearly before the Profession, and, without taking too much on himself, has explained the reasons which induce him to adopt one mode of practice rather than another.

Mr. Hancock is not an advocate for returning the hernia without opening the sac. He dwells with much force on the impropriety of employing the taxis too long; and on the equally fatal error of administering strong purgative medicines soon after the operation. Numerous statistics are brought forward in support of the positions laid down by the Author, who has contrived to treat a very difficult subject, if not in a new, yet in a creditable manner.]

The Life and Correspondence of Andrew Combe, M.D. By GEORGE COMBE. Edinburgh. 1850.

[Our notice of this Work is brief, for we propose devoting more than usual space, in an early Number, to the memory of a wise and virtuous man. In the meantime we strongly recommend Mr. Combe's history of his brother's life to the attention of our readers. The young Practitioner cannot meditate too deeply on the example here set before him of the combination of high intellect with most of the virtues which ennoble a Christian character.]

A Microscopic Examination of the Water supplied to the Inhabitants of London and the Suburban Districts. By ARTHUR HILL HASSALL, M.B., F.L.S. Pamphlet. London, 1850.

[Mr. Hassall has given us, in this pamphlet, some useful information regarding the existence of specific impurities in London water. We think, however, that the utility of the observations has been somewhat overrated. Every one knows that organic forms are to be found in all impure water, and but little is gained by any simple statement as to the existence of one organic form rather than another. What we really want is the *amount* of organic matter in a given quantity of water, *i. e.*, the degree of organic impurity. This is given much more accurately by chemical analysis (which does not, as Mr. Hassall states, dismiss the organic ingredients of water with a notice as mere "traces") than by any microscopic investigation, which necessarily does not deal with quantity. If Mr. Hassall will estimate the amount of organic matter in two gallons of the common water of each Company, he will be giving us more accurate information than could be acquired in any other way. At the same time, the matter of the pamphlet has cost labour, and, as far as it goes, is of importance. We shall, perhaps, return to it more fully hereafter.]

The Microscopic Anatomy of the Human Body in Health and Disease By ARTHUR H. HASSALL, M.B., M.R.C.S. London. 1850.

["A more useful and more noble work has never been offered to the Medical Profession," says a contemporary Journal, in speaking of Mr. Hassall's book. We shall take an early opportunity of examining into the truth of this assertion. It is painful to observe the manner in which some Journalists prostitute their pages in behalf of their friends, and the effrontery with which they not only degrade the English language, but sacrifice truth and honour, making the "worse appear the better cause."]

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1. *On the Use and Abuse of Alcoholic Liquors in Health and Disease.* (Prize Essay.) By WILLIAM B. CARPENTER, M.D., F.R.S., &c., &c. Pp. 283.
2. *Temperance and Total Abstinence*; or, the Use and Abuse of Alcoholic Liquors in Health and Disease. By SPENCER THOMSON, M.D., &c., &c. Pp. 184.

[We believe we may justly claim for Medical men the credit of being the most efficient promoters of those great social reforms which are more important for the happiness of nations than any political or dynastic changes. The two works quoted above must have an important influence in diffusing a correct knowledge of the use and abuse of a dietetic and medicinal substance, which is most potent both for good and evil. They embody the opinions of the most thoughtful of the Profession, and may safely be taken as the legitimate expression of Medical science. It is curious enough to see how two minds, viewing the same subject from somewhat different points of view, have arrived at nearly the same conclusions. We shall take an early opportunity of analyzing the two works carefully, of seeing how far they differ, and what has been the method of investigation of each writer. At present we need only commend them to the perusal of all who are interested;—and who is not interested in the attempts at the eradication of a frightful vice, and in the determination of a Medical point of great importance. Dr. Carpenter's work is what we should have anticipated from one of our great physiologists; and, as to Dr. Thomson's Treatise, we cannot bestow higher praise upon it than by saying, that the adjudicators must have had no little difficulty in deciding between it and the Essay which gained the prize.]

Portraits of Diseases of the Skin. By ERASMUS WILSON, F.R.S. Fasciculus V. London. 1850.

[One would imagine that nothing were more easy than to reprint, in a faithful manner, the external appearance of cutaneous disease; yet the task must be a difficult one, if we are to judge from the unsuccessful efforts which have been made since the days of Willan, and the wretched specimens of some modern sign-painters. To say that Mr. Wilson's Work is "*facile princeps*," would not be saying much for it, because it is the only English delineation of cutaneous disease that will bear a moment's inspection. But we can go further, and assert, that the plate representing Ichthyosis will bear comparison with any which has been produced in any other country. A little less coquetry about the accessories would, we think, improve some of the plates; but this is a mere secondary affair.]

Pathology of the Human Eye. By JOHN DALRYMPLE, F.R.C.S. Fasciculi IV. and V. London, 1849.

[We have already expressed a most favourable opinion of the splendid plates which illustrate the present Work. The fasciculi now before us are, if possible, superior in colouring and execution to those which preceded them. In the fourth Number we have illustrations of conjunctivitis, ulcers of the cornea, and the sequelæ of inflammation attacking that membrane. Fasciculus V. contains illustrations of inflammation within the globe of the eye, the various forms of iritis, and a peculiar inflammation of the sclerotica, not hitherto described in English works. The plates illustrative of iritis, its various forms and terminations, are of exceeding beauty and faithfulness.]

Surgical Anatomy. By JOSEPH MACLISE, Surgeon, Fasciculi V. and VI. London. 1850.

[We have had so often occasion to notice this excellent work, that we shall here merely repeat our recommendation of it. A little more attention to clearness in the descriptive part would enhance its value. Mr. Maclise affects words which are certainly not English]

Manual of the British Marine Algæ. By WILLIAM H. HARVEY, M.D., Professor of Botany Royal Dublin Society. Pp. 351. Plates 27. London: 1849.

[We are at all times delighted with the publications of Mr. Van Voorst. They have but one fault—they are too few. We have prepared an elaborate review of this interesting production of Dr. Harvey, the excellent curator of the museum of Trinity College, Dublin.]

MEDICAL REFORM.—A Memorial from the town of Retford has been presented to Sir George Grey to the following effect:—That your Memorialists request your influence in obtaining a Charter for the foundation of a new and independent Royal College, in the place of the present Society of Apothecaries. And for inducing Her Majesty's Government to frame and to carry through Parliament, with as little delay as possible, a Medical Reform Bill, containing provisions calculated to give effect to the new incorporation of those engaged in the general practice of Medicine, Surgery, and Midwifery, throughout this country. Signed by W. T. Gylby, W. Gylby, jun., S. F. Flower, W. Mee, George Chapman, T. P. Davies, W. Pritchard, W. Allison, Samuel Marshall, Horatio Nelson, Henry Beevor. —N. B. The *Memorial* was signed by every General Practitioner in the town, and if it had been sent throughout the Parliamentary division, would have had the same signatures as those attached to *Petitions* containing the same prayer.

DR. BARNES has been appointed Surgeon-Accoucheur to the Western Dispensary.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

April 23, 1850.

B. Phillips, Esq., F.R.S., Treasurer, in the chair.

PROFESSOR ROKITANSKI.

Professor Rokitanski was unanimously elected an honorary Fellow of the Society.

A CASE OF VERY LARGE HÆMATOCELE OF THE SPERMATIC CORD, PROVING FATAL AFTER TEN YEARS.

By WILLIAM BOWMAN, F.R.S.,
Professor of Physiology in King's College, Assistant-Surgeon to King's College Hospital, and to the Royal London Ophthalmic Hospital.

TO WHICH IS ADDED,

A CASE OF VERY LARGE HÆMATOCELE OF THE TUNICA VAGINALIS IN AN OLD MAN, TERMINATING FATALLY.

By THOMAS BLIZARD CURLING, Esq.
Surgeon to the London Hospital.

The subject of Mr. Bowman's case was a farmer aged sixty. Ten years before his death, a tumour, with ecchymosis, appeared in the right groin after a fall from his horse. It long remained stationary, and, after seven years, suddenly enlarged, during walking, to an enormous size, and involved the scrotum, there being generally ecchymosis of all the parts involved. When the integuments had regained their natural colour, the tumour was punctured, and some mixed arterial and venous blood escaped. The puncture healed, but the tumour gradually increased, and, in December, 1848, it formed a mass reaching from the groin to the patella, of many pounds weight, and resting permanently on the thigh, on which, by its great weight, its hinder surface was, as it were, moulded. It was then again tapped; and this operation was followed by decomposition of the contents, and the formation of much gas within it, so that, when shaken, a mingled sound of air and fluid was perceptible. Mr. Bowman saw the patient with Mr. Paget, of Leicester. He was exceedingly reduced, and suffering from great constitutional irritation. Many large veins ran transversely over the tumour; the right testis was at the lowest point of the swelling, resting on the knee-joint, and apparently quite uninvolved. Two incisions were made, giving exit to several pints of putrid fluid and clotted blood, and to much gas. The man, however, died a few days subsequently. No *post-mortem* examination could be obtained. Mr. Bowman alludes to the rareness of hæmatocele of the cord, to the cases recorded by Pott, and to the notices of it in the works of Boyer and Curling. He also comments on some published cases of Sir A. Cooper, and of Mr. White, of Manchester, bearing an analogy to the one he details. He considers that the practical conclusion to be deduced from a general view of these cases is, that true hæmatocele has little tendency to undergo spontaneous cure; and that, sooner or later, it will probably enlarge and prove fatal. There should, therefore, be no unnecessary delay in carrying out the ordinary practice of laying open the cavity by a free incision, when the persistence of the swelling and other circumstances indicate the presence of extravasated blood, and when a previous trial of milder measures shall have evinced their inefficacy to bring about absorption.

Mr. Curling's case is that of an old man, who had suffered for many years from a hæmatocele of the tunica vaginalis. It had never been shown to a surgeon, till its great size and the occurrence of inflammation, complicated with retention of urine, led to its being treated. Mr. Curling saw him with Mr. Pritchett, and made an opening, by which three pints of dark grumous blood were discharged. On the patient's death, a week after, the exact noture of the disease was ascertained by dissection.

Mr. Macilwain remarked, that these were a very serious class of cases, terminating fatally or successfully, according as they were improperly or properly treated. Mr. Bowman, in some general remarks in the paper, stated that, in these cases, it was desirable to lay open the sac. He (Mr. Macilwain) was not certain whether Mr. Bowman intended to apply this remark to cases of effusion of blood only, or to those of effusion of a dark bloody-looking fluid into the cavity of the tunica vaginalis. The two cases were essentially different, and required essentially different treatment.

Mr. Bowman said, his remark was to this effect:—When it appears, from circumstances, that an effusion of blood has taken place into the cord, or tunica vaginalis, and when it is evident that it will not be absorbed, it is desirable to make an incision to remove the effused blood, for it is clear, from the details of these cases, that hæmatocele is a disease that has no tendency to a spontaneous cure, but rather to increase in size, to occasion inflammation and suppuration of the sac, and sooner or later end fatally.

Mr. Macilwain said, that he objected to lay open the cavity when the membrane had undergone certain changes, because the operation would excite great irritation, and because the disease might be cured by a much milder method, and, in some cases, without any operation at all. In one case he recollected the tunic had been tapped, and the fluid drawn off was so like blood, that if it had not been kept, it would have been mistaken for it. The man was in bad health, and the tunica vaginalis thickened. It had been his intention to inject the sac cautiously, after the general health had been improved; but when that had been effected, the fluid was absorbed, and the tunica vaginalis resumed its natural structure as nearly as might be. All traces of thickening disappeared. This he believed to be nothing uncommon; as the general health improved, absorption would go on. If blood be effused, and a permanent tumour formed, with thickening of the walls of the cavity, it would be best treated by evacuating it by a simple puncture, and attending to the general health,—much better than by making a large incision, which is frequently followed by irritative fever.

Mr. Curling had often found, that when blood has been effused, either in the cellular tissue of the cord, or in the tunica vaginalis, it may be absorbed by rest and proper treatment: but when, as in these cases, the effusion is very large, and acts as a foreign body, giving rise to inflammation of the sac, it is the obvious duty of the surgeon to make an incision to afford relief. He would wish to ask Mr. Bowman whether he had formed any opinion as to the source of the hæmorrhage in his case. He himself thought it more probably came from an artery than from a vein, and he was the more inclined to think so, as the tumour was on the right side, because the spermatic veins on that side are apparently less liable to disease than those on the left. The artery furnishing the blood was probably in a diseased state. Cases of hæmatocele have occurred before in persons with diseased arteries. He had, however, met with cases of extravasation of blood into the cellular tissue of the cord on the left side in persons, caused by local injury, who were at the same time labouring under varicocele.

Mr. Bowman, in reply, stated that any opinion as to the source of the hæmorrhage must be purely a matter of conjecture, and of rather loose speculation, as no examination had been made of the body after death. He had himself been inclined to attribute the bleeding to a ruptured spermatic vein, they being more liable to such an injury than the arteries, because they are larger vessels and their coats are thinner. Ten years before his patient died, he had an effusion of blood into the inguinal canal, in consequence of falling from his horse, and, it is probable, at the same time receiving a blow on the part from the saddle, which would be more likely to rupture a vein than an artery. The second effusion occurred while he was walking, and may have been caused by the rupture of a distended spermatic vein.

Mr. Arnott said, with respect to the question of laying open an hæmatocele, he should not hesitate. He had never seen any bad consequences follow it, and yet he had met with some very large tumours of the kind. In one instance it was difficult to say whether it were a case of medullary sarcoma or of hæmatocele. An incision was made into it, with the intention of removing it, if the former proved to be the disease; the coats were found to be much thickened, and, on cutting through them, a large quantity of coagula and some fluid blood were evacuated. The man got quite well. While the effused blood is fluid, tapping, with cold applications, may perhaps succeed. Cysts, containing blood, occur in other parts of the body, as in what is termed hydrocele of the neck, which may contain either serum or blood. There was a young woman under his care in the hospital with one of these tumours. It appeared to be a diseased thyroid gland; it increased in size. Having misgivings that it contained fluid, he passed in a trocar, and withdrew from three to four ounces of a thick black fluid. He left the canula in the cyst; inflammation and suppuration followed, and the patient ultimately did well. With regard to the source of the hæmorrhage, he was not prepared to allow that the veins could furnish so large a quantity of blood, but the source must be a mere matter of speculation. Hydrocele of the neck may be cured by an operation short of an incision. A man in 1847 had one of these tumours; by the trocar a quantity of red fluid, serum and blood, was withdrawn; it seemed like arterial blood. He (Mr. Arnott) decided to let it fill again, and then to puncture and inject as for hydrocele. The tumour in a few days was as large as before, and very tender. Iodine was injected, and considerable swelling took place; not diminishing at the end of eleven days, he anticipated it would be necessary to operate again, but it afterwards gradually diminished in size, and in a few weeks disappeared. He agreed with Mr. Bowman, that when the hæmatocele is very large, the only practice that should be adopted, is to lay it open, and induce suppuration. Can we inject encysted hydrocele of the cord? Experience is against it, becauses it causes so much inflammation and constitutional irritation. It is just possible, in hæmatocele, while the blood is still fluid, that it may be treated by cold, or by the iodine injection.

Mr. Ure related a case of a large cyst in the inguinal region, apparently containing arterial blood, which he evacuated by tapping. By touching the edges of the wound thus made, with potassa fusa, he induced suppuration, and healed the cyst.

Mr. Macilwain deemed caution necessary in meddling with a thickened tunica vaginalis, from experience of cases which had terminated fatally from so doing. One of these cases occurred in St. George's and another in St. Bartholomew's some years since. Very slight neglect on the part of the patient under these circumstances will bring on considerable constitutional irritation. He (Mr. Macilwain) recollected tapping a hydrocele for an elderly man. In a few days he was sent for; the tumour was as large as before, and there were symptoms of malignant typhoid fever, so that he thought the man would die. A slough formed, large coagula were removed, and the man afterwards got better. A similar case having occurred under the care of a friend, in which there was considerable hæmorrhage, instructed by the instance he had just named, he let out the fluid at once.

Dr. Black suggested, that if the source of the hæmorrhage were from a ruptured artery, in the first instance, the bleeding might continue for some time, for the weight of the tumour and of the testes dragging it down, would prevent the artery retracting and contracting, as usually happens for the arrest of arterial hæmorrhage.

Mr. Moore thought that the source of the hæmorrhage might have been, in the first instance, from the rupture of a vessel of some size, and then a sac having been formed, irritation and congestion going on, fibrine would be deposited, new vessels formed in the fibrine, and the weight of the part rupture these, so that the consecutive hœmorrhage might be furnished from the whole surface of the sac. With respect to the treatment, there could be no question as to the propriety of laying open the sac, and evacuating its contents, but there might be as to whether it was right to leave it open. He thought that the same treatment should be adopted as for large abscesses. He (Mr. Moore) is in the habit of making the puncture through a thick part of the walls instead of the thinnest, and then endeavouring to close the cavity.

Mr. H. C. Johnson would ask Mr. Bowman the exact situation of the left testicle, whether there were any large vessels at the upper part of the tumour towards the abdomen, and whethere there were any communication with the abdomen. As the upper part of the tumour was small and pendulous, if not able to save the testicle, he would ask, would it not have been better to remove the whole mass, as the tumour was so large that the subsequent suppuration must be excessive, and the constitutional irritation very great?

Mr. Bowman said, Mr. Johnson's question was very pertinent and important. When he first saw the case, the man was extremely reduced, and nearly moribund; the contents of the sac were almost putrid; there was putrid gas in it, as well as blood. If he had seen the case before, when the man's health was better, he should have been disposed to entertain that question very seriously. The position of the left testicle was such, that it might easily have been avoided; but, from the appearance of the large vessels in the tumour, there must have been a great quantity of blood passing to them, through the neck of the swelling. White's cases show the possibility of the complete and successful extirpation of such a disease.

Mr. H. C. Johnson had not asked the question with a view to criticise the practice, which was the best that could be followed, but in order to obtain information for the treatment of such a case in future.

Mr. Curling said, that the operation recommended by Mr. Johnson had been successfully performed in a case of Pott's.

CASE OF DISARTICULATION OF THE LEFT CONDYLE OF THE LOWER JAW,

WITH EXCISION OF NEARLY THE LEFT HALF OF THE BONE, ON ACCOUNT OF A VERY LARGE CARTILAGINOUS TUMOUR GROWING FROM AND OCCUPYING THE SITE OF ALL THAT PART OF THE BONE, SAVE THE CONDYLE AND NECK.

By W. R. BEAUMONT, Esq.,
Professor of Surgery in the University of Toronto, Canada.

This patient, a child aged 7 years, was admitted into the Toronto Hospital, September 17, 1849. The tumour, on his admission, extended upwards to the zygoma and malar bone, almost covering the temporo-maxillary articulation; it reached downwards to fully an inch below the angle of the jaw, extending inwards into the mouth as far as the mesial plane backwards, beyond the ramus of the jaw, and forwards to the posterior bicuspid. It pushed the tongue quite to the right of the mesial plane, concealed the velum, and almost completely filled the isthmus faucium; the molar teeth of the upper jaw were deeply imbedded in the tumour, which kept the mouth at all times open, with a constant dribbling of saliva, the upper and lower incisors not meeting by fully half an inch. The tumour had been first observed three months back—September 25th, 1849. Professor Beaumont performed the operation for its removal, commencing by making a curved incision, (the concavity upwards,) extending from the lobule of the ear to the angle of mouth, dissecting all the integuments from the tumour. The tumour was firmly wedged in under the malar bone; the outer wall of the jaw was cut vertically through with a small straight saw; the section was then at one stroke completed with a strong bone forceps; the condyle was disarticulated by being firmly grasped in a forceps, the joint being opened by dividing the external lateral ligament and capsule. The patient did very well; a small salivary fistula was formed in the cheek, which eventually healed on December 1st, 1849. The patient was quite well. The right lower half of the jaw was drawn a very little towards the left side, about the eighth of an inch; the external cicatrix was a mere line.

CORRESPONDENCE.

STAPHYLORAPHY.

[To the Editor of the Medical Times.]

SIR,—If you had read in the French journal *L'Union Médicale* the note that I have communicated to the Academy of Sciences, you would certainly have abstained from your accusations against that celebrated Academy, and against myself.

I said, in this note, that the English and Americans had happily modified the method of M. Roux, and that, while the operation of Staphyloraphy had formerly frequently failed, it was now generally successful.

In my note I referred for further details to the original works of MM. Pancoast, Warren, and those of Professor Fergusson, whose method I related in describing the peculiar knot which he has recommended.

Mr. Fergusson has had the kindness to send me his three Memoirs, through my friend Mr. Avery, by whom I was, at the same time, informed of his own successful cases.

The ideas of Mr. Fergusson have been carefully exposed in the *Archives Générales de Médecine*, and the, French Surgeons do not merit, as you seem to think the reproach of ignorance of the works of their foreign brethren.

The instruments, which I used with perfect success in the two cases related in my note, have been represented in the *Union Médicale*, and bear no resemblance whatever to those of Mr. Fergusson.

My incisions pass through the entire thickness of the velum palati, and are a combination of the lateral divisions of Dieffenbach, Pancoast, Liston, and those of Warren, of the anterior and posterior pillars of the fauces. I consider it, besides, as very advantageous to renew the sutures upon the still united points, so as ultimately to insure the consolidation of the adhesions, a manœuvre which my instruments permit me to perform with great facility.

Your readers will understand, that I never thought of taking away from Mr. Fergusson the honour of his discoveries; on the contrary, I have delighted in making known his eminent merit.

Accept, Mr. Editor, my best respects,

C. SEDILLOT.

Strasbourg, May 1, 1850.

[The strictures to which M. Sedillot refers in the above letter, were suggested by a perusal of the *compte rendu* of the Academy of Sciences, published in the *Gazette Médicale de Paris*. In that publication the principle of dividing the muscles which tend to separate still further the moieties of the fissured velum palati, was distinctly claimed as the main merit of M. Sedillot's discovery. No allusion whatever appeared to have been made to the operations of Fergusson or Warren. On referring to M. Sedillot's original Memoir, we find the operations of Messrs. Warren and Fergusson distinctly referred to; and we find, moreover, that all which M. Sedillot seems to claim as original in his operation, is the cutting *completely through* the thickness of the velum palati, and certain modifications in the instruments employed, which render the operation more easy and effective. Under these circumstances, we can readily express our regret that the error of a Contemporary Journal should have led us to attribute to M. Sedillot an act of plagiarism of which he was guiltless. That error, however, still exists in France, even in the bosom of the Academy of Sciences.—ED. *Med. Times.*]

THE ROYAL COLLEGE OF SURGEONS.

[To the Editor of the Medical Times.]

SIR,—Upon looking at the names attached to my diploma of the College of Surgeons some thirty or forty years ago, I much prefer the honour of being a member of the College by their deed, to that of being made a 'Fellow by the present men in office, without even paying the ten guineas, and bringing a reference as to character!!! I sincerely believe there are few members of my standing who do not feel the *prospectus*, as published by you in your last number, as a gross insult.

I remain, yours obediently,

A SUBSCRIBER TO YOUR JOURNAL FROM THE COMMENCEMENT.

SELF-SUPPORTING DISPENSARIES.

[To the Editor of the Medical Times.]

SIR,—I observe with much satisfaction the present movement which is excited on the subject of Self-supporting Dispensaries, and that there is a Society formed in London for the purpose of promoting the establishment of these valuable institutions throughout the United Kingdom and Ireland.

About twenty years ago, Mr. Smith visited Derby for the purpose of propounding his Dispensary scheme to a Medical Society, which at that time had been recently formed in the town. His plan corresponded exactly with the explanation given of it by Dr. Routh, in the last Number of your valuable publication. After much discussion, a motion was carried, by a majority of one vote, "that such dispensaries were neither beneficial to the poor nor advantageous to the Medical Profession." The subject, however, excited much interest in the town, and at length it was decided by a public meeting, that a dispensary should be established on Mr. Smith's plan, under the title of "The Derby Self-Supporting Charitable and Parochial Dispensary."

Previous to the Poor-law Union Act coming into operation, one of the parishes of the town contracted with the Committee of the Dispensary for Medical attendance on the paupers, which arrangement proved highly beneficial to the paupers, and afforded general satisfaction to the parishioners. It was of course discontinued when the Poor-law Union was formed. Since that period, till within about five years, the Institution consisted of a "charity class,' in connexion with a "free class." This union was found, upon the accumulated experience of fourteen years, during which it existed, to be utterly incompatible with the satisfactory working of the Dispensary. Many persons were admitted with charity tickets who were well able to pay as "free members;" thus the inducements for the working classes to become enrolled as "free members" was diminished, and the principle of self-reliance which such institutions are intended specially to promote was disregarded. With great difficulty, and, after contending with much opposition, at length, about five years ago, a separation of the "charity class" was effected, and the Institution became exclusively a self-aiding or provident dispensary. This alteration met with the entire sanction and approbation of Mr. Smith, with whom I corresponded on the subject. Since this important change in the constitution of the Dispensary took place, it has been gradually increasing in popularity and usefulness. The present number of enrolments considerably exceeds a thousand, although, in accordance with the rules, all those who allow their weekly contributions to be in arrear for three months are excluded, but are eligible for re-admission by paying up their arrears, not exceeding three shillings and sixpence. Many who have been thus excluded anxiously apply to be re-admitted. The number of enrolments during the year (1845) preceding that in which the rules were altered, was 287; the following year, or that in which the rules were altered, 863; during the last year, ending Michaelmas, 876.

As one of the Medical Officers attends once a-week at the Dispensary, with the Honorary Secretary and the Dispenser, for the purpose of receiving the contributions of the "free class," and enrolling fresh members, and, as it is necessary for individuals wishing to be enrolled, personally to attend, which few who are not really proper persons for admission would be willing to do, sufficient security is afforded for preventing the admission of persons who are well able to pay for medical assistance in the usual way.

Although at first many prejudices existed against the establishment of the Derby Dispensary, especially amongst the Medical men, I am happy to say that this is no longer the case, and that the general opinion throughout the town is, that it is an institution of inestimable value, diffusing its benefits extensively amongst the poor and working-classes, and fully answering the anticipations of its most sanguine supporters.

The mode of providing Medical aid to paupers by the Poor-law Union Act is notoriously unsatisfactory. The Medical Officers for the most part are inadequately remunerated for their services; and as they are required to supply their own medicines, they are unable to perform their duties conscientiously without subjecting themselves to positive pecuniary loss; and not unfrequently the union surgeon has imposed upon him more labour than can possibly be performed properly by one individual. It is not surprising, therefore, that there should exist amongst the poor, as Doctor Routh states, "a strong prejudice against parochial relief." If Self-supporting Dispensaries were established generally throughout the country, these evils might effectually be prevented by the Guardians contracting with the committees of such institutions for supplying medical aid to their paupers; and the following are some of the advantages which would be secured by such an arrangement.

1. The labour of attending paupers would be divided amongst an adequate number of individuals.

2. The pauper would have a choice of his Medical attendant.

3. He might at certain periods, if he chooses, change his Medical attendant, or have consultation in his case.

4. Medicines would be supplied from the Dispensary,—a plan greatly superior to those at present adopted, which requires the Union Surgeon to find his own medicines.

The Annual Report for 1846, the year after the separation of the charity-class was effected, gives the following gratifying statement. "The alterations made in the rules for abolishing the 'charity-class,' and increasing the facilities for becoming 'free members,' have been attended with the most favourable results; the benefits of the institution have become much more extensively diffused; the working-classes gladly avail themselves of the advantages it affords. The average enrolments during the year is sixteen a week, and they are rapidly increasing. Many individuals who were formerly obliged to apply to

the Union for Medical aid when needed, have become 'free members,' and enjoy all the 'privileges of the Institution.' These gratifying results are in perfect accordance with the experience afforded by Provident or Self-supporting Dispensaries existing in other towns, as Coventry, Burton, &c., where they were first formed without a 'charity class,' and tend greatly to establish the important fact, that such institutions are fully adequate to secure Medical aid to that numerous class of persons who, although not receiving parish relief, are too poor to pay for Medical attendance in the usual way. To effect such a desirable object, it is, however, necessary that the respectable inhabitants of the town should co-operate with the Medical Officers of the Institution, and assist, by their contributions, in effecting a mode of relief to the sick-poor so unexceptionable in principle, so efficient in its operations, and so generally satisfactory to those for whose benefit the Institution is intended."

From the experience afforded by the Derby Dispensary, as above stated, the following conclusions might, I think, be fairly drawn, and be a sufficient answer to the query, contained in the latter part of Doctor Routh's letter:—"How are they to be established,—by separate establishments, or by engrafting the principle into those ordinary Dispensaries already established in the metropolis?"

1. That a "charity class," in connexion with a "free class," in the formation of Self-supporting Dispensaries, has a direct and powerful influence in checking the development of the self-aiding principle; that the two principles of self-reliance and reliance on charity, are antagonising principles, utterly incompatible with each other, and incapable of harmonising, or, indeed, existing together for a long continuance.

2. That when Self-Aiding or Provident Dispensaries are formed without a "charity class," and are assisted by the co-operation of honorary subscribers, they are of inestimable value, affording a mode of relief to the sick-poor unexceptionable in principle, efficient in its operations, and generally satisfactory to those for whose benefit they are intended.

3. Such Institutions might become powerful agents in affording efficient Medical aid to paupers under the Poor-law Union Act, and would be free from the objections to the system at present adopted for affording medical aid to sick paupers.

Apologising for troubling you with such a long communication, for which, however, the importance of the subject must be my excuse.

I remain, Sir, your obedient servant,
JOHN JONES.

Derby, April 27, 1850.

COOPERIAN PRIZE FOR 1853. STRUCTURE AND FUNCTION OF THE SPLEEN.

[To the Editor of the Medical Times.]

SIR,—It has recently been announced, that the subject for the Cooperian Prize is, "The Structure and Function of the Spleen;" that is, though every one may not be aware of it, the structure and function of a thing which is not a whole, but a part; the structure and function of the roots of a vein which has also a trunk, and, what no other vein besides has,—branches. Now, as the spleen or roots of this vein is to be the prize-subject for 1853, peradventure its trunk will be the subject for 1856, and its branches for 1859! At this rate, the physiological *pons asinorum* will be got over in nine years! The question, What are the structure and function of the roots of this vein or spleen? is as imperfect a question as, What are the structure and function of its trunk, or of its branches? The real question is, or ought to be, What are the structure and function of the *whole vein*—roots, trunk, and branches? This is a complete and rational question, and admits of a corresponding and satisfactory reply; but the first, like the second and third questions, is partial and imperfect, which may perhaps account for every answer to it, hitherto, having been the same.

When physiologists become sensible of the absurdity and imbecility of the doctrine which teaches that the digested food, either wholly or partially, passes from the small intestines into the lacteals and through the thoracic duct—a tube a foot and a half in length, and only of the diameter of a "crow-quill"—*into a vein situated under the left collar-bone*,—it will not be long then before they perceive—for nothing can be more obvious or simple, unless it be the function of the urinary bladder—the office and action of the vein of which the spleen is the roots, and whose branches are in the liver, and whose trunk extends across between the two organs, from the inner surface of the former to the under surface of the latter, and connects them. They will then see, and wonder they ever could *not* see it, that this vein receives by the gastro-intestinal or mesenteric veins, which terminate in its trunk, all the drink and digested food, as well as the blood from the stomach and bowels, and effects their slow and gentle propulsion through the liver into the heart. The idea that it is the left subclavian vein which receives by the thoracic duct "the fresh nutritive materials derived from the digestive process," is preposterous! Did any one, after indulging in too hearty a meal, ever feel any uncomfortable fulness or distension under his *left collar bone?*

Physiologists, instead of joining, as nature has done, the roots of the vein in question to the trunk, and the trunk to the branches, view them separately. They do not see that the spleen, the splenic, and portal vein, and its branches, are all parts of one vein, and endeavour to satisfy themselves as to the office and action of that vein; but, heedless of its trunk and branches, as though they did not exist, they occupy themselves solely with its roots or spleen. Its minute structure, of course, is then the grand subject of investigation. The microscope is had recourse to, a few Malpighian corpuscles are picked out, and careful admeasurements made of their diameters! Never was there a more true and just remark made than the following: "the way in which men too commonly proceed in scientific inquiries is to exercise their perceptive to the exclusion of their reflective faculties, and to endeavour to make out by the facts of perceptivity merely, those relations which can be evolved by the intellect alone." (a)

As for the splenic artery, it splits up into capillaries for the roots of this vein to originate from. Its tortuosity minimises the quantity of blood that passes through it, and is a plain indication that it is not the blood of the splenic artery that is required, but its capillary terminations. If there were no splenic artery there could be no splenic capillaries; if there were no splenic capillaries there could be no venous roots; no venous roots, no trunk; no trunk, no branches; no roots, trunk, nor branches, no vein; no vein, no vessel filled to serve as the receptacle of the drink and digested food, as well as the blood from the stomach and bowels, and adapted for effecting their slow and gentle propulsion through the liver into the heart.

I remain, Sir, faithfully yours,
17, Finsbury-place South, JOHN JACKSON.
May 7, 1850.

[Mr. Jackson, having thus plainly told the physiologists of the present day that they are a set of blockheads, must not be much surprised if they return the compliment. If an absurd and preposterous doctrine is held on *either* side, we think that Mr. Jackson must bring forward some proof far more satisfactory than he has yet adduced, that *he* is not the one to advance it. From the pertinacity with which he urges, under every conceivable variety of forms, his pet idea of the propulsive function of the spleen, one would think that he had actually witnessed the movements which he so confidently describes. Let him *demonstrate* the rhythmical contractions and dilations which must exist if his doctrine be correct; and this not by *à priori* argument, but by the actual exhibition of them; and it will then be time to inquire into the other parts of his system of doctrines. Those who are incompetent to estimate the value of the researches which have shown that the spleen is something more than a fibro-vascular contractile net-work of arteries, capillaries, and veins, assume that tone of contempt for them which ignorance commonly inspires.

The limitation of the Cooperian Prize to Essays which are based on original researches, instead of to mere recapitulations of the unsatisfactory results of previous inquiries, is a most wise proceeding, which does not in the least put Mr. Jackson out of the field. Let him only work out a set of new observations, and we doubt not that his Essay will receive all the consideration its merits deserve.—ED. *Med. Times.*]

LETTER FROM DR. HASTINGS.

[To the Editor of the Medical Times.]

SIR,—In the account of the Deputation to Sir George Grey, published in the *Medical Times* of the 11th instant, there is an inaccuracy which I should very much wish to have corrected.

As President of the Provincial Medical and Surgical Association, I had the honour to present a Memorial to Sir George Grey, and I introduced it by a few prefatory remarks. These remarks you have been so good as to give correctly, but they are followed by the wrong Memorial; and, in order that you may be enabled to correct the mistake, I send to you a copy of the Memorial which I really did present to the Secretary of State.

I am the more desirous to set this matter right, as the Association has, from its formation to this time, steadily advocated the necessity of the adoption of the representative system by the governing bodies of the Medical Profession; and the principles which have uniformly guided our Society are clearly enunciated in the Memorial I had the honour to present to Her Majesty's Home Secretary.

I have the honour to be, Sir,
Your obedient servant,
CHARLES HASTINGS, M.D., President.
Worcester, May 13, 1850.

[We regret that we have not space this week to insert the Memorial accompanying the foregoing letter. It is but just, that the Council of the Provincial Association should be relieved from the imputation of presenting to the Home Secretary such a document as that we published last week, which appears to have issued from other bodies. The publication of the Council's Memorial will effect this object. It must be understood, however, that the remarks applied by us to the Provincial Association, were elicited by passages contained in the actual Memorial of the Council, which was not inserted in our Journal because it had not been duly forwarded.—ED. *Med. Times.*]

THE COLLEGE OF SURGEONS AND THE PRACTICE OF PHARMACY.

[To the Editor of the Medical Times.]

SIR,—It appears from the resolutions of the College of Surgeons, which were published in your Journal of the 4th instant, that Fellows of the College practising midwifery shall not be ineligible to the Council. The force of public opinion has at length compelled the College to remove one of the disabilities imposed upon their members from obtaining seats in the Council. It yet, however, appears that all practitioners in pharmacy, either directly or indirectly, are to be deprived of the honour of becoming members of the Council.

It would be very desirable if the College were to declare what they mean by persons practising pharmacy. The majority of General Practitioners do not now charge for medicine. They give advice and provide all their patients with medicine, while the "pure surgeon" provides only a certain class of his patents with medicine. It is well known that persons suffering from gonorrhœa or syphilis, who apply to one of the pures for advice, will be furnished with blue pill or acetate of lead, as the case may require. The question, then, of practising pharmacy is only one of degree. I have, however, no design of interfering with the regulations of the College of Surgeons; my only object is to show the impossibility of attempting to perpetuate the distinctions between a pure Surgeon and General Practitioner; and I may in conclusion add, that, if the College of Surgeons will only let us alone in our endeavours to raise the respectability and increase the usefulness of the Medical Profession, we will offer no obstacle to any attempt they may make to raise the dignity of the College of Surgeons.

JOHN LIDDLE.

4, Alie-place, 8th May, 1850.

LEBERT ON SCROFULA.

[To the Editor of the Medical Times.]

SIR,—In your Number for April 20, is a *resumé* of the "important Work of M. Lebert on Scrofula, containing the essence of his doctrines and experience." Were it not for this præmium, and the fact that Lebert's Work enjoys already no small share of notoriety, a perusal of the Propositions themselves would have excited in me very little notice or attention. If, however, they do epitomize, even reasonably well, the contents of his publication, the bulk from which such a sample is extracted must really, in my humble judgment, consist of a very unfortunate combination of the inconsistent and the second-hand. We are told that a tuberculization of the lymph-

(a) Mr. Vincent.

atic glands, with a tendency to inflame, soften, and suppurate, is not scrofula, because scrofula consists in a series of chronic inflammations and cacoplastic formations. Proposition 5 represents that superficial tuberculosis may often exist alone, without any scrofulous complication; while Proposition 6 links the two conditions as synonymous. From the latter, too, we learn, that a few hundred cases of external glandular tubercle were quite exempt from any trace of tuberculosis. This I do not pretend to criticise or understand; but, even admitting that, by some special definition in his own work, M. Lebert has restricted the term "tuberculosis" to deposits affecting vital or internal organs, does he really maintain that a mere matter of locality—the morbid product being the same—is to determine whether the case be scrofulous or not? Would it not be equally reasonable to represent a patient with venereal nodes as free from syphilis, because the skin was unblemished and the fauces sound? Scrofula is not tuberculosis, assuredly, as M. Lebert informs us; but it is as palpably evidenced thereby, as it is by phthisis, ophthalmia, or white swelling. Scrofula is not a disease, but a cachexia, or tendency to disease,—a liability to functional perversion,—which *is* attended in many, nay, the majority of instances, by distinct outward and visible signs. So much for the French Author's pathology. The few propositions expounding his practice are far less exceptionable, being, in fact, an imperfect summary of what has been the established practice for years in our own country. Few of us would be disposed to question the accuracy of such truisms as those declaring that mercury, iodine, cod-liver oil, will not induce the absorption of inorganic tubercle,—that steel, quinine, air, exercise, and good living will, probably, benefit strumous cases.

Yours, Sir, obediently,

LECTOR RUSTICUS.

April 24, 1850.

[Lebert regards scrofula and tubercular disease as distinct affections, and not as mere varieties or degrees of each other. He believes that either may exist without the other; but that the former is frequently complicated by the latter, and that external glandular swellings often result from the deposition of tubercular matter in those glands, without any scrofulous affection of them. The paragraph, No. 6, in our April Number, to which "Lector Rusticus" refers, did not very clearly express the opinion of Lebert. The passage in the original, from which we suppose our Paris Correspondent framed the sentence, runs thus:—

"Nous avons vu toutefois que sur les 614 cas qui forment l'ensemble du matériel de nos observations sur les scrofules et sur les tubercules glandulaires, ces derniers manquaient 439 fois."

We can assure our Correspondent, that whatever opinion he may have formed from the brief notice of the work in our Correspondent's letter, that it is a most able production.]

HEALTH OF LONDON DURING THE WEEK ENDING MAY 11.

The deaths registered in the Metropolitan districts, in the week ending last Saturday, were 857. Taking ten corresponding weeks of the years 1840-9, it appears that the number now returned is less than in the years 1847-49; that it is also less than in 1848, but greater than in the same week of the other six years. The average of the ten weeks is 870, or corrected for increase of population 949; as compared with the corrected average, the mortality of last week shows a decrease of 92 deaths. The total deaths from the zymotic, or epidemic class of diseases, continue to be less numerous than usual, amounting only to 146, while the corrected average is 179. From diarrhœa there were 8, which is about the average; this disease exhibits a decline on former weeks. But scarlatina shows an increase, the numbers in the last three returns having been 21, 17, and 25, whilst the average for last week is 24. Five children under five years of age died of infantile or remittent fever. A woman of 54 died of scurvy. Diseases of the respiratory organs, exclusive of hooping-cough and consumption, were fatal to 137 persons, which is about the corrected average. The mortality from consumption continues unusually low; this disease carried off 116 persons, whilst the corrected average is 145; and in the corresponding weeks of 1840-9 it ranged from 117 to 148.

The deaths in the several hospitals of London occurred as follow:—

GENERAL.		Sussex & Brandenburgh-house (Fulham) ...	0
St. George	8	Northumberland-house	0
Westminster	0	Whitmore House ...	0
Grey Coat Hospital ...	0	Pembroke House ...	0
Charing-cross	0	St. Luke	0
Middlesex...	5	Miles'	1
University College ...	0	Warburton's	0
Royal Free Hospital ...	0	Lunatic Asylum, Bow ...	0
King's College	2	Bethlem	0
St. Luke, City-road ...	0	Lunatic Asylum, Brixton	1
St. Bartholomew... ...	8	Retreat, Clapham ...	0
London	3	York House, Battersea ...	0
Guy's	8	New County, Wandsworth	1
St. Thomas	7	Peckham House ...	1
Bethlem, London-road...	0	Camberwell House ...	1
FOR CONVICTS.		LYING-IN.	
Hospital Ship, Unité ...	0	Queen Charlotte's ...	0
Penitentiary Hospital, Millbank	0	British	0
MILITARY AND NAVAL.		City of London	0
Royal Hospital, Chelsea (South)	0	Hospital, York road, Waterloo 2nd part ...	0
Royal Hospital, Greenwich (East)	3	FOR PARTICULAR CLASSES.	
Royal Military Asylum	0	Female Servant Invalid Asy., Stoke Newington	0
Coldstream Guards Hos.	0	German Hospital... ...	1
Grenadier Guards' Hospital	0	French Hospital	0
Scots Fusilier Guards ...	0	Portuguese Jews' Hospital	1
Royal Ordnance	2	German Jews' Hospital	0
Dreadnought Ship ...	0	FOR SPECIAL DISEASES.	
LUNATIC.		Small Pox...	0
Kensington House ...	0	Fever Hospital	0
Munster-house (Fulham)	0	Lock	0
Normand-house(Fulham)	0	Consumption, Brompton	0
Otto-house (Fulham) ...	0	Opthalmic, Charing Cross	0
Blacklands-house ...	1		

TOTAL, 49.

MORTALITY TABLE.

Deaths in the Week ending Saturday, May 11, 1850.

(Metropolis.)

CAUSES OF DEATH.	Total.	Average of Ten Weeks.
ALL CAUSES	857	869
SPECIFIED CAUSES	529	866
Zymotic (or Epidemic, Endemic, and Contagious) Diseases	146	164
SPORADIC DISEASES:		
Dropsy, Cancer and other Diseases of uncertain or variable seat	43	51
Tubercular Diseases	159	184
Diseases of the Brain, Spinal Marrow, Nerves, and Senses	123	111
Diseases of the Heart and Blood-vessels	37	30
Diseases of the Lungs, and of the other Organs of Respiration	137	127
Diseases of the Stomach, Liver, and other Organs of Digestion	50	59
Diseases of the Kidneys, &c.	14	7
Childbirth, Diseases of the Uterus, &c.	8	11
Rheumatism, Diseases of the Bones, Joints &c.	9	9
Diseases of the Skin, Cellular Tissue, &c.	2	1
Malformations	2	2
Premature Birth and Debility	20	20
Atrophy	24	13
Age	37	48
Sudden	...	9
Violence, Privation, Cold, and Intemperance	18	18
Causes not Specified	28	3

The following is the number of Deaths occurring from some of the more important special causes:—

Apoplexy	27	Heart	35	Phthisis	116
Bronchitis ...	51	Hooping-cough	36	Pneumonia ...	56
Cholera.....	...	Hydrocephalus	22	Scarlatina	25
Childbirth	4	Influenza	4	Small-pox	4
Convulsions...	41	Liver	7	Stomach	4
Diarrhœa	8	Lungs	8	Teething	6
Dropsy	15	Measles	14	Typhus	26
Erysipelas ...	7	Paralysis	23	Uterus	4

BIRTHS AND DEATHS.

	Births.	Deaths.	Births over Deaths.
Males	643	430	213
Females	677	427	250
Total.....	1320	857	463

METEOROLOGY OF THE WEEK.

Day.	A.M. S.W.	P.M. N.	Difference between the Mean Temperature of the day and the same day on an average of 7 years.	Ditto. Dew Point.	Mean of Thermometer. Dry.	Mean of Barometer.	Rain in Inches.	Amount of Horizontal Movement of the Air.	Electricity.*
Sunday	S.W.	P.M. N.	— 3·2	38·9	48·8	29·466	0·04	Miles. 95	
Monday	N.N.E.	N.E.	— 8·8	40·9	42·8	29·438	0·65	155	
Tuesday.....	N.E.	N.E.	— 7·0	44·5	44·7	29·360	0·20	40	May 5, 9 p.m., and May 11, 3 p.m. Positive, and tension weak. These were the only times at which electricity was shown during the week.
Wednesday.	N.E.	N & WSW	— 7·7	42·7	44·3	29·320	0·24	85	
Thursday ...	W.S.W & N	N.N.E.	— 6·7	39·1	45·5	29·727	0·06	45	
Friday	S.S.E.	S.W.	— 3·6	36·5	48·8	29·850	0·00	150	
Saturday ...	S.W.	W.S.W.	— 0·5	44·1	52·1	29 866	0·00	115	
Means ...	N.E. & S.W.		— 5·4	41·0	46·7	29·575	SUM 1·19	SUM 686	

* In this Column, A. stands for Active; N. for Negative; and P. for Positive.

MEDICAL NEWS.

APOTHECARIES' HALL.—Names of gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, 9th May, 1850:—Daniel Henry George Wildbore, Old-street; Harry Speakman Webb, Oxford; William Bayldon, Royston; William Swift Wade, Leeds; Michael Sweeknam, St. John's-street; Joseph Williams, Portloe, Cornwall; Henry Searle Gaye, Minehead, Somerset; Robert Thomas Elsam Cooke; Thomas Moyles, Queen's County; William Gordon Wotton, King's Langley; Hanward Kean, Marlborough, Wilts; William Skinner, Stockton-on-Tees; Edward Doyle, Irishtown, Dublin; James Henry Crisp, Bath; Henry Parfitt, Bruton, Somerset.

ROYAL COLLEGE OF SURGEONS.—The following gentlemen having undergone the necessary examinations for the diploma, were admitted members of the College at the meeting of the Court of Examiners on the 10th instant:—Messrs. Howard Holland Macmurdo, New Broad-street; John Darwen, Birmingham; Lucius Warrillow, Birmingham; Daniel Pitt Skipton, Lansdowne-circus, South Lambeth; Joseph Henry Shorthouse, Tonbridge, Kent; Jacob Edward Dyas, Kells, County Meath; William Dean Fairless, Hexham, Northumberland; William Skinner, Stockton-on-Tees, Durham; and William Charles Owen, Hon. East India Company's Service, Bengal.

LIST OF GENTLEMEN WHO HAD THE DEGREE OF M.D. CONFERRED UPON THEM BY THE UNIVERSITY OF ST. ANDREW'S, MAY 4, 1850.—Scholes Butler Birch, M.R.C.S.L., and L.A.C., Lancashire; Charles Crighton Bramwell, M.R.C.S.L. and L.A.C., North Shields; Henry Cholmeley, M.R.C.S.L., Lincolnshire; William Cholmeley, M.R.C.S.L., Lincolnshire; Robert Crawford, Licentiate Faculty of Physicians and Surgeons, Glasgow, Glasgow; John Tasker Evans, M.R.C.S.L. and L.A.C., Hertford; Robert Hicks, M.R.C.S., Hertford; William Highmore, M.R.C.S.L. and L.A.C., Dorsetshire; James Keiran, M.R.C.S.L., Dublin; Thomas McCheane, M.R.C.S.L., Cork; John McGilchrist, M.R.C.S.E., Lanarkshire;

Joseph Ozanne, M.R.C.S.E., Lancashire; George Peacocke, M.R.C.S.E., Yorkshire; Alex. A. Prout, M.R.C.S.L., Middlesex; Richard Ross, L.R.C.S.I., county Donegal, Belfast; Edward Williams, M.R.C.S.E., Denbighshire.

UNIVERSITY COLLEGE.—CHAIR OF ANATOMY.—At a meeting of the Council of the College, held May 11th, Mr. Quain's resignation of the Senior Professorship of Anatomy was accepted. Mr. Quain continues to hold the Professorship of Clinical Surgery.

LONDON HOSPITAL MEDICAL SCHOOL.—The medals and honorary certificates awarded for the past summer and winter sessions were distributed on Tuesday, May 14, by C. B. Stutfield, Esq., Chairman of the House Committee, in the presence of a large body of governors and friends of the Institution. Hospital Gold Medals, presented by the Governors of the Hospital for zeal and humanity in attendance on the patients:—Medical—Henry Hanks, Bath. Surgical—George Cochrane Millar, Finsbury. Medicine—Senior class, gold medal, Robert Brudenell Carter, Tiverton; honorary certificate, Thomas Peete, Margate. Junior class, silver medal, Alfred Adams Mantell, Bilton; honorary certificate, Ridley Porter, Bishopsgate. Surgery—Senior class, gold medal, George Edmund Small, Plymouth; honorary certificate, William Thomas Bell, Great Grimsby. Junior class, silver medal, Robert Brudenell Carter. Anatomy and Physiology—Senior class, gold medal, Alonzo Henry Stocker, Chelsea; honorary certificate, G. E. Small. Chemistry—1st. silver medal, William Horder Sheppard, Shaftesbury; 2nd. silver medal, Thomas Busby Jeffs, Finsbury. Forensic Medicine—Silver medal, Alonzo Henry Stocker; honorary certificate, Bernard Charles Beale, Bow. Botany—Silver medal, Alonzo Henry Stocker; honorary certificates, William Henry Harris, Barnstaple; Owen Jeffries Llewellyn, Paddington.

NAVAL APPOINTMENTS.—Surgeon James J. Paul, M.D. (1845), from the Hydra, 6, steam-sloop; and Assistant-Surgeon Charles D. Shephard (1845) to the Prometheus.

MILITIA APPOINTMENT.—Royal Cumberland Regiment of Militia; Thomas Mitchell, gentleman, to be surgeon.

APPOINTMENT.—Dr. Robert Barnes has been elected Surgeon-Accoucheur to the Western General Dispensary, in the vacancy occasioned by the resignation of Dr. Bennett.

THE COLLEGE STUDENTSHIPS.—The Council of the Royal College of Surgeons have just announced their intention to fill up one of the two vacancies in this excellent department of their staff; only members of the College, under twenty-six years of age, are eligible for the appointment, which is held for three years at a salary of 100*l.* per annum, at the expiration of which period an appointment in the Army, Navy, or Honourable East India Company's Service is presented to the retiring official. It is not perhaps generally known, that Mr. John Quekett, the distinguished microscopist and Assistant-Conservator of the Hunterian Museum, was formerly a College Student.

THE COLLEGE LECTURES.—Professor Paget brings his Lectures on Inflammation to a close this day (Saturday). This course is considered the best yet delivered by the learned Professor, who has been listened to by a large and increasing auditory every day.

OBITUARY.—At Leicester, on the 8th instant, William Hughes, Esq., Surgeon, of Basing-lane, Cheapside, aged 38.—On the 27th ult., at Lytham, Thomas Hull, M.D, late of Beverley, Yorkshire, aged 75.—Suddenly, on the 4th instant, at Cork, Stephen Lawson, Esq., Surgeon, 7th (Queen's Own) Hussars.—On the 13th instant, suddenly, John Mountford, Esq., Surgeon, of Gloucester-street, Queen-square, aged 68.

THE COMMISSIONERS OF LUNACY.—A Parliamentary paper has been printed, showing the expenditure of 13,747*l.* 16s. 7d., on account of the Lunacy Commissioners for one year. They made nearly 100 visits in six months, saw about 40,000 patients, and travelled about 25,000 miles in the period. Their salaries (six) amount to 9,000*l.*, and that of the secretary to 800*l.* Their travelling and personal expenses in the year were 2,355*l.* 11s. 11d.

The Society of Medicine at Lyons offer a prize of 300 francs (£15) for any author who will bring before it ten cases of constitutional syphilis caused by gonorrhœa. The Society reserves to itself the right to examine the patients.

SURREY DISPENSARY.—5,600 persons are said to have been attended to at this dispensary in the course of the year; 4,000 of whom were cured. The expenditure was 1,283*l.*; the receipts 1,250*l.* At the anniversary festival a subscription was obtained amounting to nearly 300*l.*

NEW ADULTERATION OF MILK.—The Parisian milkmen have adopted the plan of mixing a solution of dextrine with the milk they vend. It has been stated that neither physical nor chemical means avail to discover this cheat, but it appears that iodine dissolved in water imparts a more or less deep violet hue to the fluid, according to the greater or less amount there is of solution of dextrine in the sophisticated milk.—*Journal de Chimie Médicale.*

THE ASTLEY COOPER PRIZE.—The prize of 300*l.* has been awarded, by the Physicians and Surgeons of Guy's Hospital, to Mr. Wharton Jones, of Conduit-street, for his "Essay on Inflammation."

SIMULATION OF DISEASE.—A strange case of this description has lately been detected in the Sussex County Hospital:—"A woman, Betsy Ginn, aged 23, was brought before the weekly Hospital Board, charged with wilfully producing the disease for the cure of which she had applied to the hospital. The statement made against her was, that very numerous diseased patches of the skin, over nearly the whole of her body, limbs, and face, were the result of her own application to the parts of hydrochloric acid. Several patches were nearly as large as the palm of the hand; and they were in different stages, the recent ones being yet in a gangrenous condition, others (from which the sloughs had suppurated) were deep and troublesome ulcers, and many (the majority) had healed, but with disfiguring scars, and in some places to the injury and contraction of the adjacent sinews. The woman, after many denials and prevarications, at length admitted her guilt; and further, that she had been practising the deception for a period of nearly three years, four months of which she had spent in the Colchester Hospital, and nine weeks in University Hospital, London, without the imposture being discovered. While begging for mercy, she stated that she had been induced so to act, in the hope of obtaining a better home than a workhouse." To the foregoing instance of fraud, which we abridge from the *Essex Herald*, we are enabled to add a few particulars:—When in University College Hospital, this person suffered, or at least complained of suffering, almost constantly from nausea, and she took little food—in fact, refused almost all of a solid kind. The case was at the time regarded as identical with those described by Sir B. Brodie, under the heading, "Peculiar Species of Dry Gangrene of the Skin," in his latest published work, viz., "Lectures Illustrative of various subjects in Pathology and Surgery." (Page 382.) The foregoing circumstances were well calculated to lull suspicion; but a question now arises, as to whether the loathing of food was real, or only pretended, the better to carry out the deception. Food might have been procured and eaten at night. The cases mentioned by Sir B. Brodie as having been observed by Mr. Keate and himself must, we apprehend, be placed in the same category as that above noticed, at least until some *bonâ fide* example of the same appearances, arising without a like cause, shall be placed on record.

TO CORRESPONDENTS.

We are most unwillingly obliged to defer the interesting paper on Entroplum, by Mr. Haynes Walton, with its illustrative engraving; Dr. Lightfoot on Puerperal Fever; Dr. Bushnan's account of the Medical School and University Town of Bonn; Mr. Hunt on Psoriasis; and the continuation of the papers by Mr. Henry Smith, on Perineal Section, and of Mr. Braid, of Manchester, on Human Hybernation. Were our Journal three times its size, the kindness of our friends would enable us to fill its pages.

"Chirurgus" writes:—"I have just read your remarks on the appellation which has been given to *Mr.* Hawksley. It is rather remarkable, that *Mr.* Hawksley is *Dr.* Hawksley, he being an M.D. (1849) of the University of London, and not merely a Bachelor, as you have supposed. It may be doubted, therefore, whether Dr. Hawksley is not, in point of fact, superior in professional rank to those who have thought proper to assign to him an inferior designation."

"Studens" asks, how "the mammæ and female genital organs participate in their affections by means of the inoculation of the internal mammary and epigastric arteries."

[This explanation, which was the hypothesis of Riolet, who, strange to say, only found it in woman—"in mulieribus semper animadverti"—is totally inadequate to explain one of the most palpable cases of sympathetic action. The presumption of a determination of blood, or any such alternating or simultaneous determinations as are here supposed, is a doctrine in physiology totally unfounded in fact.]

We shall be happy to receive the paper offered by A.B.; but we must remind him, that facts are no further useful than in so far as they are susceptible of generalization. On this subject, says Mr. Walker, "in the cultivation of science, without facts we are idle dreamers; without reasoning, we are trifling fools; and to the folly we add knavery, when we pretend that it is not yet time to reason, and throw on nature and on science the fault of our own capacity." ("Nervous System," p. 10.)

"Psychologist" should apply to the editor of the "Psychological Journal," who doubtless, however, will tell him, that men of genius are generally bad dissemblers, and men of talent good ones; in the former, the instinctive impulses preponderate; in the latter, the rational.

"A St. Bartholomew's First Year's Man."—No apology is necessary. We are delighted at all times to reply to legitimate questions. The Professor stated correctly, that it was tolerably well ascertained that the hair and nails may continue to grow, the perspiration sometimes to appear, and the tears to flow, after death. We might, perhaps, say with Alice in the play, "We never said it was *possible*, we only said it was *true*."

"Bookworm."—We doubt the correctness of the report; at the same time, we are ready to admit, there are many who get the credit for opinions which would belong to others, if the *tuum cuique* maxim was always observed.

"Observer" has our best thanks for his kind letter, which, however, we must decline to publish. He is quite correct in his views. *Litera scripta manet*; and, as regards society, scandalous writings are worse than scandalous conversations, for they give perpetuity, and carry to future ages, both the author's malice and the injurious effects upon the persons traduced. The pen, more than speech, is the interpreter of the mind.

Professor Simpson.—We have received a long letter from Dr. James Moffat, professing to correct some errors in the letter of our Paris Correspondent, touching Dr. Simpson's visit to the French capital. Dr. Moffat assures us, that Professor Simpson was "perfectly idolised" by the Parisians. Be it so. We always suspected the followers of Voltaire of a tendency to paganism, and should have been glad to have learned into what kind of an "unknown god" the worthy Professor had been transformed. Dr. Moffat also wishes us to state, that Dr. Simpson visited the Continent for the sake of his health, not as an advocate of chloroform; and that the meeting of the Anglo-Parisian Society was transferred to the Musée-Dupuytren, simply because the place of usual resort was considered too small. "Idolatry," it would seem, is a prevalent disease in Paris.

"H. P." inquires "the most approved method of applying pressure in cases of prolapsus ani."

[The most efficient mode of applying pressure in the case of prolapsus ani, is by means of a handkerchief attached like a T bandage, with a knot tied upon it.]

"W. P., a Constant Subscriber," asks the following questions:—"In Glasgow there are two licensing bodies, one the University, the other the Faculty of Physicians and Surgeons. Now, can you inform me whether the Faculty of Physicians, &c., examine in any College or University; and that a person, being in possession of their diploma, would be correct by styling himself as a Licentiate or Member of Royal College of Surgeons, Glasgow?"

[The Faculty of Physicians and Surgeons of Glasgow examine in their own Hall; and a person in possession of their diploma is entitled to call himself "a Licentiate of the Faculty." The license qualifies for the Army and Navy Boards, and for the practice of surgery and pharmacy.]

"Epimetheus" seems no friend to naptha, which he places in the same vain-glorious category as glycerine and the speculum. The reference to "Levret's Accouchemens Laborieux," 3rd edition, p. 8, on the antiquity of the speculum, is highly interesting. We are grateful for our correspondent's kind opinion.

"Dr. Sheridan Muspratt's" communication on the influence of chemistry in the animal, vegetable, and mineral kingdoms shall receive early insertion.

Our Bangor Correspondent is thanked for his suggestion. We will give it due consideration, but fear it is impracticable.

"W. P."—1. Consult the Navy List; 2. Depends upon himself; 3. Certainly not; 4. Ask any outfitter; 5. Consult the Navy List.

We shall take an early opportunity of availing ourselves of Mr. Self's kind and acceptable communication.

"A Subscriber from the beginning" writes:—"Being occasionally called upon to inspect emigrants, from a port in Ireland, under the 29th clause of the Passengers' Act, 1849, I would feel obliged if you will let me know how that part of it providing for our remuneration is interpreted and acted on in England. For example, I lately inspected 130 emigrants, and whether, for that, am I entitled to £2 or to but £1 6s.; or, supposing that there were but fifty, is the doctor but entitled to 10s. I take the liberty of asking you the question, as I am sure that a great number of our professional brethren are equally interested with me in the matter."

[We are not aware of any court of law being called upon to interpret the clause in the Act to which our correspondent refers. If a legal opinion should be asked, we apprehend there can be no doubt what the interpretation would be. If our correspondent were fortunate enough to borrow £130 at 1 per cent. interest, would he not be rather astonished if his creditor demanded £2 instead of £1 6s. at the end of the year, in addition to the principal. The *practice*, we imagine, can be learned by addressing a note to Lieutenant Lean, R.N., Manager, Government Emigration Office, 70, Lower Thames-street.

Want of space compels us to defer, until next week, the interesting communications of our Parisian and Edinburgh correspondents.

The Paper by Mr. Partridge was a Clinical Lecture, delivered at King's College Hospital, and reported by Mr. Samuel Griffith, late House-Physician to King's College Hospital.

ORIGINAL LECTURES.

THE LUMLEIAN LECTURES FOR 1850.

DELIVERED AT THE ROYAL COLLEGE OF PHYSICIANS.

By R. B. TODD, M.D., F.R.S.

ON THE PATHOLOGY AND TREATMENT OF DELIRIUM AND COMA.

LECTURE III.

What organ or parts are affected in Delirium and Coma?—The Brain the Organ of Consciousness—Parts of the Brain essential to Consciousness—Delirium an affection of the Intellect—Coma an affection of the Consciousness—Seat of the diseased action in Delirium—Seat of the diseased action in Coma—Nature of the morbid processes which can cause Delirium and Coma—Influence of certain narcotic poisons in producing Delirium and Coma—Flourens' doctrine of a special elective affinity between certain poisons and certain parts of the Encephalon—Immediate effect of one of these narcotic poisons on the Brain—Congested state of the Brain in poisoning by Opium—Is the Congestion the Cause of the change in the Brain's mode of action?—A certain degree of Exhaustion necessary to produce Delirium, in addition to a poisonous influence—illustrated by Delirium Tremens—Case—Evidence of Poisoning of the Brain by Alcohol—Percy's observations—Influence of Alcohol in altering the qualities of the Blood—State of the Urine in cases of Delirium—Humoral view of the Pathology of Delirium Tremens—Is there any Inflammatory process in Delirium Tremens?—Analogous points in the Pathology of the Renal Epileptic Delirium—Poisoning of the Blood by Urea—Condition of the Blood in Chronic Renal Disease—In simple Epileptic Delirium the Blood is probably poisoned—The same views applicable to the explanation of Rheumatic and Gouty Delirium—to that of Erysipelas and of Typhus—Hysteric Delirium referred to the same category as Epileptic—Pathology of Coma—Delirium and Coma result from different degrees of poisoning—Coma likewise due to Paralysis from exhaustion of Nervous Power—Conditions similar to those which produce Delirium exist in the different forms of Coma—General principles of Treatment in Delirium and Coma—Objections to Treatment by Bleeding—The Use of Opium not applicable to all forms—Conclusion.

I must here briefly recapitulate the conclusions to which the facts which I have detailed in my first and second Lectures have led me as regards the clinical history of delirium and coma. These are—

1st. That the introduction of certain poisonous agents into the blood, either directly or through the digestive organs, is capable of producing delirium and coma.

2ndly. That a deteriorated and poisoned condition of the blood is favourable to the production of delirium and coma, as in the cases of rheumatic and gouty delirium and coma, and of the delirium and coma of typhus, erysipelas, and the exanthemata.

3rdly. That the same state or states of brain which are favourable to the production of epileptic convulsions are likewise favourable to the development of delirium and coma.

4thly. That the anæmic state, or that state of blood in which the colouring matter is very deficient, is highly favourable to the production of delirium and coma.

5thly. That a shock to the brain—*concussion*—may produce coma, and likewise delirium; and that compression of the brain will produce *coma*, but not delirium

And, lastly, that in all these cases the delirium or the coma may occur in their highest degrees without the slightest evidence of any inflammation of the brain or of its membranes.

But I must state, in addition to all this, that although, in the vast majority of instances, delirium and coma, even in their most highly-developed states, occur independently of inflammation; nevertheless inflammation of the membranes of the brain is undoubtedly capable of producing both delirium and coma, and that it is often a matter of great difficulty to distinguish between the inflammatory and the non-inflammatory affections of this kind. The subject of inflammation of the brain is a large and most important one, which the time allotted to these lectures will not permit me to discuss now. I must content myself with observing, that inflammation of the brain is, in adult subjects at least, a rare disease; and, therefore, that delirium and coma arising from this cause is of rare occurrence as compared with those other forms which I have described; and that the inflammatory delirium is generally of a low kind, resembling that of typhus, and has a great tendency to pass into coma; and, further, that it is frequently ushered in by vomiting, and accompanied by a marked, sluggish, and slow state of the pulse.

We now proceed to inquire whether any adequate theory of the pathology of delirium and coma can be formed in the present state of our knowledge, both physiological and clinical? This inquiry involves answers to these queries:—1. What part—what organ—is affected in delirium and coma? 2. What is the nature of the affection, and is that affection the same for each and all those various forms of delirium and of coma which clinical study teaches us are apt to occur?

With regard to the first question, it is quite clear that we cannot assign any other seat for these remarkable states than the nervous system; nor can we locate them in any other part of the nervous system than in that part which is connected with the actions of the intellect, and with that reciprocal influence between mind and body which constitutes consciousness. Can we assign them their seat in the spinal cord? Certainly not; for we know that mental phenomena are completely independent of the spinal cord. The mind may act even when the connexion between the cord and the brain is cut off, of which we have many proofs both in clinical observation and in physiological experiment. The removal of the hemispheres of the brain will destroy the phenomena of thought and of consciousness; but the spinal cord may be taken away piece by piece, leaving intact the centre of respiration, and mental phenomena will continue unaffected, save so far as concerns the partial affection of consciousness which necessarily must result from severing the connexion between the encephalon and those parts of the body whose nerves are implanted in the separated portions of the spinal cord. We are conscious of the existence of our limbs through the connexion of them with the spinal cord, and the connexion of the spinal cord with the brain. So long as the trunks of the nerves of a limb are implanted in a state of integrity in the spinal cord, and so long as the connexion between the cord and the brain is intact, so long will the consciousness of the connexion of that limb with the body remain,—so long will the mind continue to have the feeling of the connexion of that limb; and it is remarkable, that that feeling may be fallacious; for it will exist even after the limb has been amputated, if only the conditions which I have mentioned are present, namely, the integrity of the trunks of the nerves, and of their implanted roots. Nor can can it be got rid of even after a long interval of years has elapsed from the time of the amputation. The nerves of the limb are the media of connexion between the organ of consciousness, or, in other words, the centre of sensation and the limb; and the trunks of the nerves contain in them every fibril which is destined for every point of the limb,—for every fibre of its muscular system. So long, then, as these fibres are intact as regards their nutrition and their central implantation, so long are these conditions sufficient to uphold the feeling or consciousness (fallacious though it be) of the presence of the limb, and of every part of which those fibres form an integral and most important portion.

Early last winter a girl was admitted into King's College Hospital, in whom I had the opportunity of observing the effects of the gradual separation of the spinal cord from the brain.

When she was admitted she was suffering from a paralytic state of the left arm and leg, which in many respects resembled that form of paralysis which we often see in hysterical women, so that I was led at first to regard it as a case of hysterical paralysis. I soon, however, discovered a swelling at the upper part of the cervical region of the spine, and a distorted state of the neck, owing to a paralysed state of the muscles of one side, and the consequent disturbance of the equilibrium between the antagonising muscles of the opposite side. It was then found, that all the muscles of one side were paralysed which are supplied with nerves below the level of the second vertebra of the neck—the cervical muscles, the intercostals, the abdominal muscles, and the muscles of the extremities. After a little while the paralysis began to affect the muscles of the right side of the body; the right arm first, then the leg, then the intercostal and abdominal muscles; the breathing became extremely feeble, and in parts of the lungs the most attentive auscultation could not detect any respiratory murmur. At length the breathing fell considerably in frequency, and it took place by gasps, at intervals of twenty seconds, the only muscles which seemed to retain any power being the sterno-mastoid and the trapezius, which are supplied by the spinal accessory nerve. During all this time the mind remained clear and free from any delirium, although, during the greater part of it, fully three-fourths of the body were withdrawn from the controlling power of the will.

In this case the medulla oblongata was severed from the spinal cord by the gradual compression of an enlarged odontoid process, over which there was a considerable growth of cartilage, which no doubt, by a rapid development, contributed to the ultimate rapid extension of the separation.

It is impossible to conceive a more remarkable instance of "dying by inches," than was afforded by this case. The severance of the spinal cord from the medulla oblongata took place in the most gradual manner, and therefore without any of that shock to the nervous centres which is so apt to complicate the results of physiological experiments. It was most interesting to witness how slowly, and by what small degrees, the connexion of brain and trunk was being dissolved, and how instantaneously death took place, by the annihilation of respiration, the moment the last connecting link gave way. Yet, up to the time when respiration became so impeded that the blood was imperfectly aërated, consciousness and intellectual power remained.

The brain or encephalon, then, is that part of the nervous system which is most directly and most intimately connected with the mind—upon which the mind exercises a direct influence, and which, in return, exercises an influence upon the mind.

Yet the brain itself is a most complicated organ in man and the higher animals; and therefore we shall have to inquire what parts of this organ are essential to a normal manifestation of the intellectual actions, and to the maintenance of consciousness.

Time would fail me were I to enter upon a full physiological discussion of these points. I must content myself with stating, that there are the most conclusive reasons for regarding the convolutions of the brain as that part which is connected with intellectual change—as "the centre of intellectual actions." It is the part of the brain which is most intimately connected with, and most readily affected by, the mind; and it is that layer of grey or vascular matter so intricately folded upon the surface of each cerebral hemisphere which is the seat of those unceasing changes which thought may produce, or which may excite thought. It is, therefore, reasonable to believe that any departure from the normal condition of this centre would create a corresponding disturbance or derangement of the intellectual action; or, if we admit that the mind may be disturbed primarily and independently, as I think must be admitted, then it may be stated that that primary disturbance of the mind may derange and disturb the nutrient actions of this centre.

Consciousness is feeling: the simplest act of sensation indicates consciousness—such an act is the most simple condition of consciousness; any intellectual act is also an indication of consciousness. "When I smell a rose," says the late Mr. Mill, "I am conscious; when I reason, I am conscious; when I remember, I am conscious; when I believe, I am conscious. . . . ." "If we are in any way sentient, that is, have any of the feelings whatsoever of a living creature, the word conscious is applicable to the feeler, and consciousness to the feeling."

It is important further to remark, that "the sensation is not the object of consciousness different from itself, but a particular sensation is *the consciousness* of the moment; as a particular hope, or fear, or grief, or resentment, or simple remembrance, may be the actual consciousness of the next moment."

In order, then, to understand the physiological conditions necessary for the maintenance of consciousness, we must analyze a simple act of sensation. When I smell a rose, what are the physiological phenomena? First, there is an impression made upon the sentient nerves; secondly, the change wrought in these nerves is propagated to the centre

of sensation; and thirdly, this change produced in the centre of sensation *must be perceived* by the mind in order that a true act of sensation shall be accomplished. Thus, in the act of sensation we have two classes of phenomena—one physical, proceeding from periphery to centre; the other mental or intellectual, by which all physical change is recognized. The impression of the odoriferous particles on the olfactory nerves, and the subsequent change in the centre of sensation, is the physical part; the perception by the mind of that change is the mental or intellectual part. My mind may be occupied with some engrossing subject at the time the rose is presented to the organ of smell; the physical phenomena will, nevertheless, take place; odoriferous particles will impinge upon the olfactory nerves, and the change will be produced in those nerves, and in the centre of sensation, but the mind being occupied with some other object, will not perceive the change in that centre, and therefore there will be no sensation; I shall not be conscious that such an object was presented to the organ of sense.

Thus, then, for this simplest act of consciousness, the co-operation of two parts of the brain is necessary—namely, the centre of sensation, or that part which is destined to receive sensitive impressions, and the centre of intellectual actions. The failure of the right mode of action of either of these will prevent the completion of the act of sensation. Either the physical part may fail, or the mental part.

When a man is brought under the influence of chloroform, he is incapable of sensation—partly because the centre of intellectual actions is paralyzed by the influence of the chloroform, and partly because the nerves are similarly affected.

But when a man in traumatic delirium is insensible to the irritation which must be created when he moves the injured or broken leg, or in rheumatic delirium, the rheumatic joints, he is so because his centre of intellectual action is entirely engrossed with the rapid train of ideas and fancies which occupy his mind; and therefore he does not perceive the irritant change which must be produced in the nerves of the limb by the movement and displacement of the injured part.

Now the centre of intellectual actions is the hemispheric lobes of the brain or the convolutions; the centre of sensation is, as I have shown in my Lumleian lectures of last year, and also elsewhere, the optic thalami and their downward continuations, the olivary columns of the medulla oblongata, and the posterior horns of the grey matter of the spinal cord.

These, then, are the parts which are concerned in consciousness; and an affection of either or both of a certain kind must more or less affect the consciousness: an affection of the centre of sensation, by cutting off the object of consciousness—an affection of the intellectual centre, by impairing or destroying the power of perception.

An affection, however, of the centre of sensation *alone* cannot impair or destroy consciousness, because still the centre of intellectual action remains intact. Such an affection may destroy particular kinds of consciousness; but still there remain thinking, belief, memory—all which are acts of consciousness, although the evidence of their integrity rests chiefly with the individual himself. But an affection of the intellectual centre may impair or destroy consciousness, even although the centre of sensation remain uninjured in any way; for it is evident that no impression, however vivid, upon the centre of sensation, can become a sensation, if the action of the intellectual centre be suspended, and the power of *perception* be thus destroyed.

Thus, then, we arrive at this conclusion, that to impair or destroy consciousness, the part of the brain which must be injured or suspended in its action must be the hemispheres—the convoluted surface—either alone or in conjunction with the centre of sensation—namely, the optic thalami and their downward continuations.

Now, delirium is an affection of the intellect: coma is an affection of the consciousness.

The seat of diseased action which may cause delirium is, therefore, the centre of intellectual actions—the convolutions of the brain—or such parts as are so intimately connected with them that the nutrition of the one cannot be disturbed without the disturbance of that of the other.

The seat of the diseased action which may cause coma is the same centre; with or without the centre of sensation; or the morbid process may begin in the centre of sensation, destroying certain kinds of consciousness, and may extend to the intellectual centres, making the coma complete.

From this circumstance, then, namely, the sameness of the seat of the morbid changes which are capable of producing the two states of coma and delirium, we obtain some clue to explain the remarkable analogy which we have observed to exist between the two affections as regards the circumstances under which they are apt to occur.

Having thus fixed the seat of the morbid processes which cause delirium and likewise coma, we come next to inquire what is the nature of those morbid processes.

We may obtain, I think, very satisfactory information upon this subject by referring to the circumstances under which the various forms of delirium and coma occur.

1. We know that the inhalation of chloroform and of ether will cause both delirium and coma; that the ingestion of alcohol, of opium, of Indian hemp, and other narcotic drugs, will cause delirium and coma.

A moderate dose of any of these poisons will cause delirium; a large dose will cause coma.

It seems necessary for the production of these morbid states that the poisonous material should find its way into the blood; and we know that their direct introduction into the blood is the most effectual way of creating the two states.

In such cases, then, the cause of the delirium and coma is clearly humoral. A poison circulates in the blood which has an affinity for the vesicular nervous matter of the brain, and which, therefore, disturbs its nutrition. No part is more obnoxious to the influence of any poisonous agent which may be circulating in the blood, as the vesicular matter of the convolutions of the brain; for no part is more abundantly supplied with blood-vessels. The pia-mater, which lies in contact with the whole of this undulating surface, is a membrane of blood-vessels, from which innumerable minute vessels penetrate the vesicular matter. A piece of this grey matter of the convolutions successfully injected, appears perfectly red, from the multitude and the proximity of the blood-vessels; and there is no other vesicular matter in the brain, except that of the laminæ of the cerebellum, which is so largely supplied with blood-vessels.

It was Flourens, so far as I know, who first broached the ingenious idea of a special elective affinity between certain poisons and certain parts of the brain, whereby he explained their tendency to act primarily and specially upon one part in preference to another. Thus alcohol will act primarily upon the cerebellum, and give rise to the unsteady gait of the drunkard by impairing the co-ordinating power of that centre: carried to a higher dose it affects the intellectual centre and causes delirium, and ultimately coma. Belladonna affects primarily the centre of sensation, and particularly the special centre of implantation of the optic nerves: whence the dilated pupils and the amaurosis which arise from the use of this drug; and afterwards, the belladonna having paralysed the centre of sensation, destroys the powers of the intellectual centres, and causes coma.

Now, what is the immediate physiological effect of a large quantity of any of these narcotics on the brain?

On examining the brains of persons dead of poisoning by opium or by belladonna, the vessels of the brain are found turgid with fluid blood.

It is this congestion, some will say, which causes first the delirium, and afterwards the coma. The effect of the opium is to cause congestion; the effect of the congestion is to compress the brain.

But this explanation will not bear the test of careful examination. The congestion is rather the effect of the injury done to the brain and to the blood by the opium, whereby the attraction of materials from the blood, suited to the nutrition of the brain, is retarded, and ultimately stopped. Now, this force of attraction between the blood and the tissue is a powerful agent in the maintenance of the capillary circulation; when, therefore, it is impaired, the blood moves slowly and feebly through the capillary system, and there is need of increased force on the part of the heart to keep up the circulation at all. Hence, then, in cases of this kind, the congestion is due to the condition of the blood itself,—in fact to its contamination by the poison which has been introduced into it.

Nor can we discover in the brain tissue itself any evidence of its having undergone compression, such as one might fairly look for as the result of over-distension of the blood-vessels.

Furthermore, if we look at the mode of accession of delirium tremens, we shall find that there is another condition requisite for the development of the malady besides the ingestion of alcohol. This is an exhausted and depressed state of the whole system, caused by the withdrawal of the stimulus, or by the use of antiphlogistic remedies, or by the loss of blood, or by the privation of food.

I shall give a good illustration of this in a case which occurred to myself. I had on several occasions attended a gentleman of high professional position for illnesses brought on by the use of brandy and wine in undue quantity. These illnesses always consisted in attacks of vomiting, with tenderness of the epigastrium, and more or less of sleeplessness. I found that the best means of correcting these symptoms was by small doses of calomel and opium,—starvation,—iced water.

He had one of these attacks at the end of last year, which yielded very readily to the treatment pursued, in the course of three days; and on the fourth day I allowed him a mutton chop and one glass of wine. I should have been more liberal in my allowance, had I known that during the previous night he had had threatenings of the horrors. In the evening of the day on which he had the chop and wine,—the first food of a substantial quality which he retained on his stomach for some days,—he began to have illusions, to fancy he saw persons in the room, and to see black beetles crawling over him. This, however, passed off, and he slept for an hour or two. When he awoke, the illusions came on stronger than before; he got up in a rage, and went to his servant's room adjacent, collared him, and accused him of introducing strange men into his room for the purpose of robbing him. The delirium now manifested itself in full force, but yielded very readily to the free administration of alcohol and opium.

A preliminary condition, however, necessary to the development of delirium tremens is a deterioration of the blood by alcohol. No doubt exists now that in cases of poisoning by alcohol the alcohol enters the blood, and by a very rapid absorption. It seems certain that alcohol is one of those substances which is directly absorbed into the blood-vessels of the stomach without undergoing any change in that organ; for MM. Bouchardat and Sandras have detected it in the veins of the portal system; and Dr. Percy has added to our knowledge the important and interesting fact, that alcohol appears to have a special affinity for nervous matter, for he found it, in animals poisoned by alcohol, in the brain, in large quantity, and in considerably greater proportion, than in an equivalent quantity of blood,—a highly significant fact, explanatory of the injury done to the nervous system by the habitual use of stimulants of this kind in undue quantity.

When alcohol is taken into the system, then it enters the blood directly unchanged, and it is eliminated partly as alcohol,—at the lungs, at the liver, and the kidney, for Dr. Percy detected it in both those fluids. Now, at each of these places it must injure the blood,—at the lungs, by attracting a portion of the oxygen which ought to go to the blood itself, thereby diminishing the oxygenation of that fluid,—at the liver and kidneys, by interfering with the eliminating power of those organs for their appropriate materials; for there can be no doubt, from the frequent occurrence of disease of the liver and kidneys in habitual drunkards, that it must materially affect the nutrition, and therefore the secreting power of those glands.

But as the alcohol is eliminated only in very small quantities at the three points I have mentioned, it is highly probable that it undergoes chemical change in the blood; that it attracts the oxygen

of the blood, and becomes converted into carbonic acid and water. Thus it would rob the blood of some of its oxygen,—it would supply carbon in, perhaps, deleterious quantity,—and it would increase the quantity of water. This increased proportion of water in the blood would seem to be by no means favourable to the natural changes of the blood itself, by which I mean more particularly those connected with the development and growth of the blood particles,—especially the red particles.

Hence we so commonly find habitual drinkers pale and flabby, as if their blood contained too much water and too little colouring matter; and, in the absence of any satisfactory analysis of the blood of such persons, it may be stated, that the fluid is probably defective in its solid ingredients, especially its colouring matter, and contaminated probably by some of the principles of the bile and urine, and by some other compound derived from a depraved secondary assimilation of the brain.

We are as yet greatly in want of sufficiently numerous and accurate analyses of the blood and urine in this as in all the varieties of delirium. Dr. Bence Jones some years ago pointed out that, in cases of delirium tremens, the discharge of phosphates by the urine is almost completely suspended; but these observations were made upon very few cases, and I am not aware that they have received confirmation from subsequent observers. In a few analyses of the urine of patients labouring under chronic epilepsy, and addicted to habits of intemperance, made for me by my friend Mr. L. Beale, jun., — than whom I know no more competent chemist,—I have not found a deficiency of phosphates, but rather an increase. But this is clearly a point requiring extensive and minute investigation, great precaution being used as to whether the phosphates discharged are due to any peculiarities in the food, or to any excessive waste in the nervous matter, of which phosphorus forms an important ingredient.

I think I have now stated enough to enable me to enunciate a theory of the pathology of delirium tremens. I would lay it down, then, that it is a delirium essentially humoral in its origin,—due to a perversion of nutrition, and especially of the nutrition of the brain, by the slow and constant ingestion of a poison,—namely, alcohol; and that the poisonous element which contaminates the blood, and which is left free to exercise its destructive and irritating influence upon the brain, when the powers of the system are exhausted, and the blood impoverished by bad living, and the employment of depressing remedies; that this poisonous material is a compound partly of alcohol itself, partly of some material derived from a depraved destructive secondary assimilation of the brain itself,—a material analogous to, if not identical with, that which probably is apt to be developed in the blood in epilepsy, and which, by its periodical accumulations, gives rise to the paroxysms of that disease.

This view of the pathology of delirium tremens will, if carefully compared with what we know of its clinical history, afford an adequate explanation of that disease. The peculiar affinity of alcohol for the nervous tissue explains the early signs of enfeebled nervous power manifested by habitual spirit-drinkers; the assumption of the existence of a poison in the blood distinct from alcohol, but generated in consequence of the habitual ingestion of that fluid, will explain the production of the delirium in the absence of the accustomed alcoholic stimulus; and the control which experience tells us may be obtained over the delirium by giving new supplies of alcohol, and by opium, indicates that the peculiar state of the blood which is generated by a long continuance of an enfeebled and depraved nutrition, is highly favourable to the production of the phenomena.

Moreover, we find in this view of the pathology of delirium tremens a satisfactory explanation of the absence in recent cases of all signs of lesion of the brain, and the presence in cases of long standing of morbid changes precisely resembling those seen in chronic epilepsy. The ingestion of alcohol, even in large quantity, does not produce acute inflammation of the brain; it exalts the nervous power—it excites the battery to its highest point—but it does so at the expense of an extreme waste of the nervous material, and of the generation of a new matter, which is deposited on the membranes and among the blood-vessels, giving rise to those opacities and thickenings of the membranes which are found in the advanced stages of this disease, as well as of epilepsy. I have several times examined the opacities of the arachnoid membrane, which are found in cases of this kind, and have always found them to consist of an accumulation of a fatty material analogous to what we find in the coats of arteries, and which is deposited in the tubes of the kidney, or in the cells of the liver, and which sometimes takes the place of the true sarcous or fibrinous element within the sarcolemma of the muscular fibre.

(To be continued.)

ORIGINAL CONTRIBUTIONS.

ON THE TREATMENT OF STRICTURE OF THE URETHRA BY THE PERINEAL SECTION.

By HENRY SMITH, Esq., F.R.C.S.

(Continued from page 336.)

I have now enumerated all the cases of stricture which were operated upon, in consequence of their being impervious to instruments, and complicated for the most part with perineal fistulæ and abscess. The remaining cases which are yet to be mentioned belong to another category, and must be looked upon as of a totally different nature from those above narrated. I have had the opportunity of witnessing four cases of stricture which allowed the passage of a catheter, but which were of such an obstinate and troublesome nature, that it was deemed advisable to perform the operation of perineal section.

In the first case, the patient was an elderly gentleman, who had suffered with stricture for many years. He came under the care of Mr. Fergusson, at the latter part of the year 1848. That surgeon found a very irritable stricture at the bulb of the urethra, which only admitted, with difficulty, a No. 2 catheter. At this time his sufferings were great, more especially when he had had an instrument passed. It appeared that the patient had had a severe attack of ague whilst abroad, about five years previously, and that he had suffered more or less from shivering fits ever since. At present he had rigors every day. Three years before, the late Mr. Liston saw him, and opened an abscess in the perinæum. Mr. Fergusson now made careful attempts to cure the stricture by dilatation, but it was so irritable, that scarcely any progress was made. The rigors persisted, and his health continued bad. Recourse was had to caustic; subsequently the patient was placed under chloroform, and a catheter was retained in the bladder; but the irritability of the parts returned; there were continual shivering-fits, and the health became reduced. Mr. Fergusson therefore determined to lay the strictured portion of the urethra freely open. This operation was done, a catheter being first passed through the stricture, and the incision was made down upon it, through the perinæum. No bad symptoms followed; the rigors from this time entirely ceased; and he left town in a month, being able to use a full-sized catheter. Mr. Fergusson has just told me, that this patient called on him a few weeks ago; he has remained quite well, and he could pass a No. 8 catheter into his bladder.

The second case was that of a patient of a friend of mine, who had laboured under stricture for twelve years; with this exception, he was healthy in every respect. Some months before the operation, his surgeon began to treat him for a tough and very irritable stricture at the bulb, through which only a small instrument could be passed. Little improvement followed the treatment by dilatation, in consequence of the irritability of the urethra, and the disposition in the stricture to contract. The patient's health began to suffer, and it was now deemed proper to resort to some other measure. He was therefore placed under the influence of chloroform, and a catheter, *en permanence*, was used; but the patient did not submit to this treatment more than a few weeks.

Some months after this, and just at the period at which a work on division of stricture appeared, the patient again placed himself under the care of my friend. He was in much the same condition as when he was before under treatment. There was still the irritability and disposition in the stricture to contract, and he was much worried by his complaint, and anxious to have it cured. It was, therefore, proposed to him to undergo the operation of the division of the stricture, to which he readily assented. A No. 6 grooved sound was first passed into the bladder through the stricture, and the incision was made through the perinæum upon the groove, and the whole extent of the contracted urethra was divided. There was no difficulty in the operation, and the patient lost but little blood at the time. A large gum catheter was introduced and then retained.

In the night afterwards there was some smartish bleeding, which, however, was soon checked. For five or six days the case went on pretty satisfactorily, at the end of which period, however, he became feverish, vomited occasionally, suffered from dyspnœa and cough, all the signs of intense irritative fever set in, and the patient was carried off within a fortnight of the operation. On the day he died a catheter was introduced, and a considerable bleeding took place. On *post-mortem* examination, nothing was found to account for his death. There was a clean cut through the urethra, all the stricture having been divided, and not a sign of suppuration or extravasation of urine within the pelvis.

The third case was one of great interest, inasmuch as the patient suffered both from stone and stricture, and one operation was performed for both affections at the same time. This case is minutely detailed in the *Medical Gazette* for April 13th, of this year; but as some may not have seen it there, I will briefly mention the particulars. The patient was admitted into King's College Hospital in the early part of this year, under the care of Mr. Fergusson. He had been sent up by a surgeon in the country for the purpose of having an irritable and long-standing stricture cured. It was noticed that the patient suffered more than usual, and especially when instruments were used, which only could be passed with extreme difficulty. In a few days after admission a calculus was discovered in the bladder. On the patient being made aware of this, he was very anxious to be operated upon at once, and accordingly Mr. Fergusson determined to divide the stricture with the knife at the same time that he removed the calculus from the bladder, and he was more particularly led to do this as the stricture was excessively irritable and contractile, and only allowed small instruments to pass.

The operation was accordingly performed, a small grooved staff being first passed through the urethra into the bladder; the stricture was cut through and a large calculus removed. The patient made an excellent recovery, and left the Hospital in about six weeks. I may mention that the stricture which was cut through was just in front of the bulb; but there was another existing about three inches from the orifice. This was somewhat tough, and, consequently, when he left only a No. 6 catheter could be passed through it; but, as he was very anxious to go out, the patient was permitted to do so, but continued to have instruments occasionally passed.

The last of this series of operations was performed but a few weeks ago, by Mr. Fergusson, on a gentleman aged 38, who had suffered from stricture for fifteen years, together with irritable bladder, accompanied by muco-purulent discharge from the urethra. He had been under the care of some of the most eminent surgeons in London, amongst whom was the late Mr. Key; but he obtained little or no benefit from their treatment. He was in the habit of wearing a full-sized elastic catheter, with which he could move about in comparative comfort; but as soon as he laid this aside he experienced difficulty in making water, and it then became impossible to pass an instrument of a size equal to that removed until one of a smaller size had been worn for some time. The patient was subject to shivering fits, and was altogether much distressed by his complaint. The obstruction to the instrument seemed to be induced by the ejaculator muscles, but especially by the anterior fibres of the levator ani, or those constituting Wilson's muscle, for at this point of the urethra it seemed that, after an instrument had been disused

for a day or two, the passage was almost obliterated. As, therefore, he got no permanent relief from any measures hitherto tried, and as there was so much irritability, and such a disposition in the urethra to contract, Mr. Fergusson thought that the free division of the urethra, and with it the muscular fibres which acted upon it, and probably set up the morbid condition, would relieve the patient. Consequently, on March 11, a small staff, with a groove, being introduced into the bladder, an incision was made through the raphé of the perinæum down upon it, and the knife was carried forwards and backwards, so as to make a free division of the urethra and its muscles. A full-sized bougie was then introduced and retained for two days, when it was removed, as the patient had a severe rigor, and the urine passed away by the wound. On the 20th, a No. 8 catheter was passed, and a No. 10 was passed occasionally until the 6th of April, when the patient left town with the wound all but closed. On the 14th he called on Mr. Fergusson, the wound was closed, and he could pass his water in a full stream without any annoyance, and he was relieved of all his former sufferings. A No. 9 catheter was at this time passed into his bladder.

It will be seen, that I have related fifteen instances in which division of a stricture by perineal section has been performed. I have entirely abstained from mentioning any cases whatever of which I have not had personal observation. In the whole of the preceding, I have witnessed and assisted in the operations which were performed; and in by far the majority I have been able to watch the treatment from the beginning to the end; and of those cases which I have not been able personally to follow out, (they are only two or three,) correct data have been furnished me through the kindness of my friends. I think, therefore, that one may be able, on looking at the results of these fifteen cases, to form some definite opinion regarding the treatment of stricture by perineal section, and to make some estimate of the merits of these operations; and I say these operations, because the cases are divided into two categories. And this separation consists in the two kinds of operation being perfectly distinct: in the one, the proceeding is put in force when no instrument whatever can be introduced through the stricture, and where, for the most part, a severe complication, in the shape of perineal fistulæ, exists; in the other class, the proceeding is totally different. It is necessary that a catheter should first be passed, to act as a guide for the surgeon, and generally speaking there are no complications in the shape of fistulæ. It is most important to bear this distinction in mind, and not to confound the two operations together, as has been done of late by some.

It will be seen, by referring to the cases in the first category, that in seven instances out of eleven the operation was attended with most fortunate results; whilst, in the remaining four, death ensued after the proceeding. At first sight, this would appear to be a very great mortality; but, if the reader will fairly consider these four cases, he will find, that only in *one* instance was death owing to the peculiar nature of the operation.

In the first case in which a fatal termination ensued, great relief was obtained by the proceeding, but, unfortunately, the patient's constitution was so shattered, and there was so much disease of the bladder, that the termination could not have been otherwise, whatever might have been done.

In the second fatal case, unfortunately, the patient caught an attack of erysipelas from another person in the same ward; and we are all aware that such a termination might have ensued after any operation, however slight, under the same circumstances.

In the fourth case, the operation could not be said to have produced the fatal result, inasmuch as the patient was in such a terrible condition, that, in all probability, nothing at this period could save the patient, but the operation seemed to give the man the only chance of life. It was unfortunate that Mr. Nunn was not permitted to make a *post-mortem* examination; for I have little doubt that he would have found ample evidence to account for the patient's death. In all probability, the bladder was much diseased, as the patient had suffered for sixteen years with stricture. In fact, there was evidence of this during life, for the large quantity of urine that was drawn off was mixed with a considerable amount of pus. This case, moreover, should hardly be considered to be in the same class as the others, for here there was an absolute and pressing necessity for the proceeding; and it may rather be termed an instance of puncture of the bladder by the perinæum, as the object of the operation was, in the first instance, to relieve the distended viscus; secondarily, to remove the stricture.

In the third case, in which death ensued, and which is the *tenth* related, there can be no doubt whatever, that the operation which had been put in force to relieve the patient was solely the cause of his death; for we find the subject—a comparatively healthy man, with the exception of his stricture—gradually get worse after the operation, and die apparently from sheer exhaustion, without any accidental attack of erysipelas, or supervention of hæmorrhage; and, on *post-mortem* examination, no cause for death in the shape of urinary infiltration was discovered; the operation had been done by a most skilful surgeon, and although it was—as most of these cases are—somewhat protracted, the difficulties were not greater than in other cases, when I have seen rapid and complete recovery ensue.

I will now refer to the second class of cases, four of which I have related. In three instances, the patients were relieved by the operation from sufferings which rendered them extremely miserable; but, in the fourth, a fine young man, with no disease upon him but his stricture, was rapidly hurried into the grave by the means which the surgeon considered to be his duty, under the circumstances, to use, and which the patient, from the severity of his sufferings, was willing to submit to.

The result of the cases which I have here brought together, will materially assist us in our appreciation of the merits of these operative proceedings, and in determining upon the circumstances and conditions in which such surgical interference should be used. There is here ample evidence to show that the free division of a stricture by perineal incision, at the point of a catheter, where the instrument cannot be introduced through the obstruction, is, when properly and skilfully employed, not only a valuable resource in the hands of a surgeon, where other means fail, but is absolutely necessary in certain cases of stricture of the urethra, which have existed for so long a time, and are so complicated by secondary morbid conditions, that he is obliged to resort to such energetic measures to restore the miserable patient to health and enjoyment. It will be seen, that the cases in the first class, where this operation was performed, are those where there was such an amount of disease in the urethra, that no instrument whatever could be passed into the bladder, and it is in such cases only, that until very lately the proposition has been made to perform this operation.

In a work, however, which has lately emanated from no less a distinguished surgeon than Professor Syme, a somewhat startling assertion has been made to the effect, that the operation of perineal section should not be put in force in cases of stricture, where instruments cannot be passed through the obstruction; and this gentleman has, moreover, pretty broadly intimated, that those who have recourse to this operation, under such circumstances, merely fly to it as a refuge from their want of skill in the employment of the catheter. But, when it is borne in mind, that Le Dran, Everard Home, Abernethy, Charles Bell, Astley Cooper, and Mr. Syme's late colleague and relation Liston, the leviathan of surgery, with many other eminent men, have practised and recommended this operation, it will be difficult to divest our minds of the conviction, notwithstanding Professor Syme's somewhat arbitrary and offensive *veto*, that the operation is one which is occasionally necessary, and calculated to be of great service to suffering patients; therefore, of considerable value in a scientific point of view.

Curiously enough, in the very same work, where Mr. Syme so freely condemns the operation in cases of impervious stricture, he strongly advocates the adoption of a somewhat similar measure in instances of stricture which admit the passage of a catheter, but which have the disposition to contract after the instrument has been withdrawn. It certainly does appear to be somewhat inconsistent, that a surgeon should denounce the proceeding of cutting through a stricture which is quite impermeable to instruments as unnecessary and unwarrantable, and yet at the same time should recommend the free adoption of a similar kind of practice in those cases in which a catheter can be passed through a stricture, and in those only,—cases which, there is little reason to doubt, may be remedied by other measures.

The cases, in the first class, which I have related, in which the operation was performed, are those in which all surgeons hitherto have considered it to be absolutely necessary to perform perineal section. In these, strictures of the worst kind had existed for periods varying from twelve to twenty years; they had either been so neglected, or so badly treated, that nothing could be done by dilatation; and, in the majority of the cases, the urethra had become ulcerated, fistulous openings formed, and consequent thickening and infiltration of the parts had taken place. Many such cases, there is little doubt, can be cured without having resort to division of the stricture; but, where there is an absolute necessity for this operation, it exists in such cases as these, and such only, with but very few exceptions. Mr. Syme has, however, made the very bold and unwarrantable assertion, that this operation is the "refuge of awkwardness, or failure in the introduction of instruments," and strongly denounces its performance. We are naturally led, from the use of this expression, and from the fact of his reprobating this operation, that Mr. Syme never performs it; and, in the work before mentioned, I cannot find what he would recommend us to do in such cases. He mentions three or four instances in which catheters could be passed, and, after a time, the patients got well; but there are no directions to guide us in such cases as I have mentioned, where no catheter whatever can be passed. It may be argued by some that a catheter may always be passed with patience; but to that the answer is, that cases are every now and then to be met with, where surgeons of skill have tried with unremitting care, and yet no progress has been made. Something effectual must be done in such instances, for it should be borne in mind that so long as a stricture of an inveterate nature remains impassable to instruments, the bad effects which are dependent upon it surely and gradually increase in severity; the bladder gets affected; the kidneys become altered in their structure and functions, and the patient is liable at any period to be placed in a most perilous condition, either from a sudden rupture of the urethra, and extravasation of urine, or from an obstinate retention of urine taking place, which will require some serious operative proceeding; as is well exemplified in the third case, where the patient was nearly carried off by extravasation of urine occurring, and producing an aggravated form of fever. Also in the seventh case, in which Mr. Bowman operated, most careful attempts to get through this stricture had been made for several months, both by that gentleman and another surgeon of great experience in the use of the catheter, yet they failed; and it was not until the patient had been brought to the verge of the grave, by the occurrence of a sudden attack of extravasation of urine, that he saw the necessity of an operation which would produce an effectual cure. In Mr. Nunn's case, also, are seen the deplorable results which may arise from an impervious stricture, for not only was retention here present, but in all probability, together from this cause and from the kidneys having shared in the long-continued irritation, their proper secreting power had been destroyed, and the blood of the patient was poisoned by the constituents of the urine. The occurrence of the epileptiform convulsions which carried him off will at least thus be accounted for.

In such instances as these, then, I would presume that the surgeon is called upon to do this operation; for, in fact, there is little else to be done which will prove equally effectual. The cases which are related above will bear me out in this assertion. At the same time it is not to be denied that the operation will now and then be attended with fatal results; there is, unfortunately, ample evidence of this amongst the above cases, yet this is only what is to be looked for in so serious an affair; and in order to

make a fair estimate of the merits of this proceeding, it should be borne in mind that it is only undertaken, or at least only ought to be, under very grave circumstances, and when the ordinary remedies have failed. It is obvious, however, that it should be a matter of very serious consideration with us, before we submit our patients to so severe an ordeal; it should only be undertaken as a last resource, and with the full concurrence of the patient, who should be made aware of the risk he may run. On this score there is scarcely ever any difficulty, as far as I have observed, for the individuals have been brought to such a miserable condition by their prolonged sufferings when the operation is really necessary, that they willingly undergo anything which will produce some relief.

It, however, becomes a far more serious question, as to whether the surgeon be justified in laying open the urethra by a free external incision, when the stricture is so far dilated as to allow an instrument to pass into the bladder. The voice of the Profession generally is against such a proceeding, but as so high an authority as Mr. Syme has strongly advocated the adoption of this practice, the merits of this operation deserve to be inquired into. Amongst four instances which I have related, where perineal incision was performed—a catheter being previously introduced through the stricture—one fatal case occurred entirely from the operation, although it was performed with ease and great skill, and nothing occurred which would lead one to suppose it would be fatal. Nevertheless, we see a fine young man, in good health, with the exception of a stricture, and that by no means of the most severe description, rapidly carried off after the operation, and one we must remember which was not absolutely necessary. Is this case alone not sufficient to render doubtful the propriety of resorting to the practice of laying open the urethra when a catheter can be passed, more especially if there are other means at our disposal? It is a well-known fact, that the urethra is very sensitive, and that not unfrequently the general system is sympathetically affected to a great extent when it is meddled with—even not harshly—as instance the intense rigors and faintings which sometimes result from the mere passage of a catheter, and it has happened that death has resulted from such a simple operation. Are we not, then, with reason, bound to expect a far greater amount of constitutional disturbance, from the more severe operation of dividing a considerable length of the urethral canal. In the fatal case I have mentioned, the patient appeared to sink entirely from simple irritation, although there was an amount of hæmorrhage sufficient to depress the patient, the occurrence of which is an additional argument against this proceeding.

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[To be continued.]

ON ENTROPIUM.

By H. HAYNES WALTON, Esq., F.R.C.S.

Entropium, or turning-in of the eyelid, is considered by Ophthalmic Surgeons to be produced by several causes,—such as relaxation or redundancy of the skin of the lid, thickening and shortening of the palpebral conjunctiva, shrinking of the tarsus, and, with one or other of these states, occasionally some faulty action of the orbicularis palpebrarum muscle. Let us examine these opinions.

Dr. Mackenzie, who divides entropium into acute and chronic,—an arrangement I disapprove of,—calls the acute a disease chiefly of the tegumentary, the chronic chiefly of the conjunctival surface of the lid. Mr. Lawrence, when referring to relaxation of the skin as one of the causes of entropium, attempts an explanation by saying, that the balance between the external surface and the mucous lining of the lid is lost, and inversion is the consequence.

To say that a looseness of the skin of the lid allows of inversion of the tarsus would be to affirm that, in a healthy eye, the skin regulates the action of the lids,—a position which would be erroneous.

There is no period of life when the skin of the lids is not loose, which is, indeed, a natural provision, so as to admit of their free motions, while that on the upper lid is always more or less folded to provide for the greater freedom of its action. The looseness of the skin is, of course, greater in advancing years, as is the case in all parts of the body, where there is naturally any fold or wrinkle arising from the absorption of the adipose tissue. It would be impossible to meet with an individual beyond the middle period of life in whom there is not a bagginess of skin on the lids; but this is too well known to require further comment.

The supposed conjunctival influence is easily refuted; for though the conjunctiva is slightly inflamed in cases of entropium, which is an effect of the irritation that the entropium causes, it does not, as far as I have observed, undergo any change; and, in the absence of any change, it cannot exert any influence on the lids. I am aware that I am making an assertion very contrary to the current opinion.

That entropium may depend on some change in the tarsus seems probable, and a theory very likely to be received as being correct. To investigate the question practically our observation should be confined to cases of entropium not implicated with other disease of the lids, or other parts of the eye.

It is a common thing for entropium to be confounded with the state of the eye with which it sometimes co-exists. The condition to which I refer results from long-continued inflammation, by which the eyelids are thickened, their cartilages more or less hardened, the cilia partly destroyed, and the remaining ones stunted and irregularly disposed. Again, long-continued entropium, especially when it occurs in strumous subjects, may produce a condition of lid that is likely to mask the disease and misdirect the attention during an investigation of its causes.

The difference in the direction of the borders of the lids, renders the lower, which is outwards, and away from the globe, better adapted for observation, when the subject of entropium, than the upper, which is inwards; and the cartilage of the lower being the flatter, any changes in it are better appreciated.

In the most marked stage, or in the worst form of entropium of the lower lid, the edge of the tarsus does not rest against the globe, so as to bind it in any way, nor is there any evidence whatever of the tarsus being shortened, but the edge is turned downwards and inwards so completely, that the cilia are hidden, while the lower part bulges upwards and outwards, the cartilage being, as it were, dislocated, and for which it would appear to require lengthening or stretching. If the lid be turned out and examined, there may not be the slightest evidence of disease in it; it may be neither thicker, nor less elastic than is natural; and that it is not shrunken, is proved by the natural position of the lid after the entropium has been removed by operation, and to which I shall refer more particularly when narrating some cases. Nearly always, except in cases of very old standing, where the cartilage has been long curved, after the lid is righted by the finger, it will remain in its correct position, till the orbicularis muscle acts, when its edge goes in again. If the cartilage were primarily at fault, the lid would not remain everted for any time, after the correcting force is removed.

In entropium of the upper lid, the inverted edge of the cartilage rests against the globe, and the convexity of the cilia is thrown on the cornea, while their extremities are turned outwards,—a position that their ends assume from the habit of using the handkerchief in that direction during the frequent calls for its application. In the more aggravated cases, the cilia are spread out on the globe. An explanation of the difference in position assumed by the edges of the lids, must be sought for in their naturally dissimilar arrangement and physical construction, and not in different causes or origins of the inversion.

Concerning the influence of muscular action, Mr. Tyrrell taught, that in certain cases, in consequence of the lax integuments, except immediately over the ciliary border of the tarsus, the larger part of the orbicularis muscle loses its power of supporting the proper situation of the lid, and when from certain occasional exciting circumstances inversion takes place, the influence of the muscle is not sufficient to counteract the effect.

Besides attributing a wrong action to the muscle, there is also physiological incorrectness,—a muscle does not require to be bound down by skin to secure its action, and the skin is equally lax over all parts of the lid.

Dr. Mackenzie thinks that the circumferential part of the muscle seems to have lost its wonted power of supporting the body of the lid, while the ciliary portion of it continuing to act, rolls the edge of the lid into the inverted position; this, while it is without any proof so far as concerns the loss of support of any part of the muscle, is a very unlikely method of its production.

Strongly suspecting muscular action to be the sole cause of the affection, but having misgivings of the power of a small portion of a muscle, which I considered to be thin, pale, and equally loose set in every part, to produce such an effect, (for, doubtless, but a very limited part of the muscle can so act on the edge of the lid,) I sought for some explanation in dissection, and happily discovered (what I had overlooked when a student, in dissections, and what is, I believe, generally overlooked; for I have not been able to meet with a description of it,) that on the free edge of the tarsal cartilage, for about two and a half lines, the muscle is much thicker, perhaps twice as thick, as in any other part, and the fibres are more compact and redder; indeed, it is almost like a distinct muscle. In the upper lid it is more developed than in the lower, where there is less distinction between it and the fibres of the circumference. In both lids the muscular fibres pass to the very edges of the cartilages.

There is, then, in these ciliary fibres, so to call them, a sufficient means or power, by which the edges of the lids may be unnaturally acted on, under certain abnormal states of the muscle, of the pathology of which I do not venture to speak; and of the exciting cause of that abnormal state, there is often no evidence.

I am enabled to prove that the muscle can thus act by adducing the interesting fact that Dr. Taylor, my colleague at the Ophthalmic Hospital, can by the power of the will effectually invert the edges of his lower lids, and produce the most complete entropium: that, taken in conjunction with the result of the operation which I have founded on the theory of the inversion being due to muscular action is, I think, conclusive.

The operation is to remove the ciliary portion of the muscle, and thereby destroy its inverting power, and also to take away as much skin of the lid as will, by the tension that its loss produces, overcome whatever degree of bending or curving the tarsal cartilage may have acquired from the unnatural action of those ciliary fibres.

I operate in this way. I make an incision along the edge of the tarsus and close to its cuticular margin from one angle of the lid to the other, and a second nearly parallel to it, about three lines distant, and joining it at the extremities. In both I carry the point of the knife at once through the skin and muscle down to the cartilage, then raise one of the angles of the flap, and dissect off the skin and muscle at the same time, by vertical strokes of the knife, taking care that the cartilage is completely bared, and I then bring the edges of the wound together by two or three sutures.

Before I illustrate the operation by cases, I will very briefly review the usual surgical treatment of entropium, and show wherein the differences exist, and which also will make more apparent than I have done, if indeed it be necessary, what appears to me to be the erroneous impressions of the immediate causes of inversion of the lids.

First, there is the removal of a bit of skin from the lid, usually, perhaps nearly always, done by pinching up a fold, and snipping it off with the scissors. That improvement occasionally follows this operation I am well aware, and that more frequently in the under than in the upper lid, from the different form of its cartilage, the more direct manner in which tension of the skin acts on its edge, and perhaps from the less muscular power to be overcome; but it is of use in incipient cases only, and then for the most part only temporarily. In well marked cases, not to say aggravated ones, it is unavailing.

When the upper tarsal cartilage is fairly inverted,

merely raising the lid will not turn it out, till the power that has inverted it is removed. I am not prepared to say, that removal of skin to a considerable extent will not always be effectual in the lower lid, yet it must be apparent that there should be a limit to the extent to which the lid is depressed.

Then there is the vertical division of the cartilage, either in its centre, or at each end, with the view of relieving its supposed contraction; but, when the cartilage is permanently curved, that alone will not suffice; although the faulty part of the muscle is cut through, and its power destroyed, there must be some means used to overcome the curve. But the deformity that results from cutting the lid in two (I have never seen but the central division practised) is a very great objection to its adoption.

Lastly, there is the excision of the cilia. This will, of course, remove a considerable amount of irritation from the eye, yet it alone will not evert the tarsus, and there must still remain a source of irritation to the eye, especially in the upper lid. But, if their excision did remedy the evils of the inversion, it deprives the eye of its lashes. Besides, it is scarcely possible to remove the cilia with the bulbs effectually, with a cutting instrument, by any of the methods that have been proposed, without taking away more or less of the tarsal cartilage, and besides inflicting injury to the Meibomian glands, all of which is objectionable, and not to be practised when better means are at hand.

I am not aware that the proceeding that I have described, and which I have executed in fifteen instances, and with good results in all, has ever been done by any other surgeon. When the operation for entropium has involved the removal of any part of the orbicularis palpebrarum, it has been executed in a very different manner, on very different principles, and with uncertain and often negative results. The ciliary portion of the muscle has never been touched; the operation has been confined to the centre of the lid. Hear what Dr. Mackenzie says:—"If this variety of inversion (that is, the acute) has lasted a considerable time, and, in addition to the mere displacement of the lid consequent to the flaccid state of the skin and irregular action of the orbicularis, there appears some unnatural disposition of the cartilage to turn inwards, it may be proper, after removing the cutaneous fold, to snip off a few fibres of the muscle, so as to form a firmer cicatrix, actually fixed to the cartilage."

Mr. Lawrence, a much later writer, echoes the same thing:—"In an incipient case it may be sufficient to excise a portion of skin; this remedy will, at least, answer the purpose for some time. To make the operation more effectual, a portion of the orbicularis should be removed also, that a firm cicatrix may be produced, or the acid may be employed, using it more freely, so that its action may extend deeper, and a solid scar be the result."

It may be necessary, in some cases, to take away more skin than corresponds to the portion of the muscle to be removed, when entropium occurs in the aged, and when the tarsus has been much bent or otherwise changed.

It is not necessary, in any instance, to remove more skin than will right the lid sufficiently to make the cilia clear the globe. It is unnecessary to produce eversion. The cause of the disease having been removed by the excision of the muscle, there cannot be a return of the entropium.

I feel sure that the operation I have described is that which is best suited for the cases of entropium that are ordinarily met with, as it was to all that have come under my notice; but that peculiar and rare cases may occur, arising from, or connected with, certain conditions of the eye, and demanding other treatment, I fully admit. Entropium from traumatic causes does not come within the scope of this inquiry.

COMPLETE ENTROPIUM OF BOTH UPPER EYE-LIDS.

M. C., aged 19, was brought to the Hospital, Feb. 29, 1850. The entire edges of the lids were turned inwards, and their cilia rested on the globes. The cornea were considerably opaque, and very vascular. From time to time, for four years, some of the cilia have been plucked out at hospitals and dispensaries.

I operated after the manner I have recommended, removing the ciliary portion of the muscle, and with it a piece of the skin. The effect was complete, the lids resumed their natural position, and the cilia were clear of the globe. Of the improvement in the state of the cornea, and the consequent restoration of sight, although great, it is unnecessary to dwell.

A friend who assisted me, and who, from his connexion with an ophthalmic hospital, is necessarily conversant with entropium, had misgivings of the benefit of any operation that did not involve the division of the tarsal cartilages, for he was fully persuaded that the inversion was due to their shrinking. I suspect that his opinion was founded on the circumstance of the lids having been smaller than usual, being undersized, a state that was natural, and wholly unconnected with the inversion; but existing with it, was very likely to be mistaken for its cause.

ENTROPIUM OF BOTH UPPER EYE-LIDS, THE LEFT HAVING BEEN OPERATED ON THREE TIMES, THE RIGHT TWICE.

A female, aged 30, applied at the Hospital in the course of the last year, and requested me to attempt some relief for the right eye; the lid was inverted, the cilia rested on the cornea, which was affected in the usual manner of these cases. The lid bore a large and disfiguring scar, the result of the removal of skin with scissors. Not the slightest benefit had resulted from the operation. The left lid had been operated on, first, by the removal of skin, after that by the application of a caustic, and then by a wedge-shaped portion taken out of the cartilage: the combination had been successful. That a considerable portion of the skin had been lost, was apparent, for the lid was everted. Yet it was not enough to turn the edge out till after the power of the muscle had been destroyed by its division. The tightening of the skin alone could not remove the entropium. I operated on the right eyelid, but took away less skin than I should have done, had there not been a prior removal of some of it. The result was decisive: the entropium was removed.

This wood-cut represents the eyes two months after my operation on the right.

I had almost forgotten to mention, that the patient was so much disgusted with the appearance of the left eye, notwithstanding the benefit she derived from the operations on it, that she almost felt inclined to lose the left rather than have it similarly treated. She had been recommended to me by a patient on whom I had recently operated for the like complaint. To judge from the form and position of the lids in these and other cases that I have operated on, one would never imagine that entropium had prevailed. Such restoration could not be effected by any operation if the cartilages were shrunken. Yet some indication of the former existence of the affection is frequently to be found in the irregularly-disposed and broken cilia, especially of the upper lid. When the cilia have been in contact with the globe for any length of time, their order is deranged, and it is questionable whether they ever recover completely. I have met with but few cases of entropium where there had not been an attempt at alleviation by plucking out some of the cilia, whence many of them get broken, and perhaps an irregular growth is induced.

It is seldom that there is any trace of the operation by scar, after the interval of a few months, sometimes weeks, provided that the skin is brought together neatly by sutures, and the sutures taken out at the proper time, we think on the fourth day, and not allowed to be thrown off by an ulcerative process.

55, Grosvenor-street.

HOSPITAL REPORTS.

ST. BARTHOLOMEW'S HOSPITAL.

LITHOTRITY—THE STONE NOT FOUND.

Under Mr. LLOYD.

The following case exemplified a difficulty which may occur as easily in lithotomy as in lithotrity, and which at once arrests both operations. The patient, a healthy man, in the prime of life, of moderately good health and strength, was brought into the theatre, for the purpose of an attempt being made to crush a stone in his bladder. He was placed with his feet in the slippers of the operating-table, and not tied up as for lithotomy. No chloroform was given him, as the operation, as now practised, is attended with less inconvenience than the passing of a bougie in many cases of stricture. The instrument being oiled and introduced, every attempt was made to discover the stone, but in vain; the position of the patient was changed; part of the water in his bladder drawn off, but all to no purpose. During nearly twenty minutes Mr. Lloyd tried with all possible care, but no stone could be felt.

Mr. Lloyd, in his notice of the case, said, that the patient had been sounded some time previously, and that a stone had been discovered; that he had again been sounded, and no stone discovered; that he had been admitted into the hospital about ten days or a fortnight previously, when the stone was very distinctly made out, and that it had now again eluded all attempts at finding it. He made it a rule, he said, not to open the bladder with a view of seizing the stone, when he could not find it with the instrument shut; or, in other words, until the stone could be clearly made out, to take no steps for crushing it. The rule might seem useless, but is, in fact, not so; more particularly in the theatre of an hospital. The patient care and attentive examination bestowed in vain on this case for above a quarter of an hour, show us how imperatively necessary it is in every case of lithotomy, before any other step is taken, to make out the existence and position of the stone, *immediately before commencing to operate*, as, if we failed in finding the stone after cutting into the bladder, the patient would have the bad consequences of a fruitless operation superadded to the irritation of a calculus in the bladder.

On the merits and demerits of this operation, and on its applicability to certain cases, surgeons have pretty well made up their minds. Twenty-three years ago, Mr. Civiale called the attention of the medical world to this plan of treatment, and wrote a book and drew up tables of cases treated by crushing the stone in preference to cutting the patient, in which scarcely an unsatisfactory result appears. Baron Heurteloup bestowed an unparalleled amount of pains in demonstrating that M. Civiale had manufactured results, and substituted for the bow-screw a machine which might ornament any museum. The plan of treatment so loudly vaunted had the usual fate of such inventions. It was adopted and rejected, decried and modified, till at last it ended in the concession, that small soft stones could be crushed by the ingenious instrument of Weiss, and not more. The readiness with which men paid their 400 guineas to have a stone extracted without cutting, even by Heurteloup's ponderous machines, manifests how necessary it is, if possible, to have an instrument that will break the stone and bring it away safely; but till that is done, and the range of the instrument carried much further than at present, we may rest assured that lithotrity will never supersede lithotomy in a vast number of cases.

[Erratum.—By a misprint of a single letter in our last report of the cases at St. Bartholomew's Hospital, we have represented Mr. Stanley as saying, that "he saw lately" a case somewhat analogous to the suppurating hydatid cyst. It should have been, "*We* saw lately." The President of the College of Sur-

geons might not feel flattered by being confounded with the author of this report.]

KING'S COLLEGE HOSPITAL.

AMPUTATION OF THE THIGH FOR PULPY DEGENERATION OF THE SYNOVIAL MEMBRANE OF THE KNEE — SECONDARY HÆMORRHAGE.

We have more than once heard an observation of one of our old teachers of surgery to this effect, that in a great number of instances amputation for disease of the knee-joint was deferred too long, and that it would be better if these operations were performed at an earlier period than is usual, as by this means the patients would be saved a large amount of suffering and the loss of time which is fruitlessly spent in endeavouring to bring about a cure in the more serious affections to which the knee-joint is liable. This opinion struck us forcibly at the time, and we were the more impressed with its value as it came from one who had had large experience in the treatment of the affections alluded to. This surgeon founded his doctrine upon the fact of his having observed that when the knee-joint has become seriously diseased it rarely recovers, and that, in the majority of cases, years have been spent in trying various measures, which have not been able to prevent the necessity of amputation after all, and that, during this time, the patient has undergone a vast amount of suffering, from which he might have been relieved by an early operation.

A case which is now in this hospital, and where an amputation has been performed at a period much more early than is generally chosen, has called forth these remarks. The case is that of a young man who was first admitted in the summer of last year, under the care of Mr. Fergusson. At this time he was suffering from disease of the metatarsal bones of the foot, for which he underwent the operation of Chopart. The patient made an excellent recovery from this, and left the hospital, an excellent stump being formed.

At the time the operation was performed there was some slight swelling in the corresponding knee, and some little pain complained of; it was, however, considered to be rheumatic, and not sufficient to deter from the operation. After having left the hospital, however, the symptoms began to increase, the knee became universally swollen, and the patient complained of pain and stiffness in the joint. He applied again to the hospital, and the usual remedies were used, but no benefit appeared to accrue, and it was now becoming evident that there was serious disease of the synovial membrane.

Mr. Fergusson was not anxious to resort to any operation, as the symptoms were by no means severe, and the health of the patient continued to be good; but the young man was necessitated to go to Russia in the course of this year to follow his employment,—that of an engineer,—and he was anxious to have an operation performed before going, if there was no chance of his ultimately regaining the use of his limb. Mr. Fergusson told the patient that it was not a case in which he should recommend amputation at present, but that disease of a serious nature was present, and that, in all probability, an ultimate recovery would not ensue, and that, even if it should take place, years would pass first. Under the peculiar circumstances, he would act according to the patient's wishes, who at once determined to lose the limb.

On May 4th amputation was performed, just above the knee joint; a short flap being made in front, and then a long one posteriorly from the tissues of the ham and the calf of the leg. A great many vessels, as is usually the case after this operation, required ligatures. On opening the knee-joint, no one present could fail of being convinced that it was well that the operation should have been performed at this early period, at a time, in fact, when the symptoms were by no means of such a serious nature as appeared to warrant the interference of the knife. A beautiful specimen of the disease, so well described by Brodie as the pulpy thickening of the synovial membrane, was seen; the disease was, however, confined to this texture; the cartilages of the joint were sound, and there was no pus in the cavity. There is little doubt, however, that the cartilages would ultimately have become diseased, and that disorganization of the joint would have taken place; and in all probability this young man has escaped, by this early operation, months, and perhaps years, of useless suffering. Most of these cases terminate in the manner which Brodie has remarked, who, in reference to this disease, has stated:—"In every case in which I have had it in my power to watch its progress the complaint has advanced slowly, and sometimes has remained in an indolent state during a very long period, but ultimately has always terminated in the destruction of the joint."

The history of this case since the operation is interesting. The patient went on very well; the only remarkable thing was, that there was considerable frequency of pulse, and the appearance of the stump seemed to indicate a want of action. At 2 a.m. on the 13th, as the nurse was applying some fresh dressing, bleeding suddenly took place to such an amount, that the patient fainted away. Pressure was applied, and the hæmorrhage was restrained, but not until the patient had been completely blanched. Stimulants were freely given, and he rallied. It may be stated, that at the time the bleeding from the stump occurred, the patient lost some blood from the nose. He had been in the habit of losing blood from the nostrils.

At 2½ p.m., Mr. Fergusson saw the patient, who appeared to have suffered considerably from the shock of the hæmorrhage; his face was blanched; his pulse was upwards of 120. No more bleeding, however, had occurred. The precaution had been taken to place a tourniquet upon the femoral artery, and the patient had been assiduously watched. The dressings were taken off, and it was found that the inner angle of the wound had opened up, and there was a coagulated mass of blood in it, just over the extremity of the main vessel, upon which the ligature still remained. A portion of the coagulum was removed; but, as one part was intimately adherent apparently to the vessel, it was not disturbed. The patient was ordered liberal stimuli, and the tourniquet was kept loosely on for safety. From this time, although it could not but be expected, no more bleeding occurred. The ligature from the main vessel came away, on the 18th. The patient has done very well, and the stump is granulating in a healthy manner.

PROGRESS OF MEDICAL SCIENCE.

FRANCE.

[Paris Correspondence.]

MILITARY MEDICAL INSTRUCTION.

Hitherto the Assistant-Surgeons of the army were exclusively furnished from pupils educated chiefly at the public expense, at the Military Hospitals of Lille, Strasbourg, Metz, and Val-de-Grace. The education of each pupil costs the State more than 6000 francs or 240*l.*; and the minister affirms, that at the end of his educational career, the military pupil is much inferior to the civil one, educated in the ordinary way at the Faculty of Medicine. Hence the Minister of War suppresses, by a stroke of his pen, instruction in the hospitals just mentioned, and sends all the pupils about their business, with one year's pay of 16*l.* for a "gratification," as the term runs here.

The experience of fourteen years has proved, according to the affirmation of General d'Hautpoul, that no advantage is obtained in submitting the Medical candidates for military service to a special education, and, if this doctrine be true, it would lead to the conclusion, that it is superfluous to require a second examination from the members of the London College of Surgeons who are desirous of entering the Army or Navy. A gun-shot wound is the same lesion everywhere, and it can make no difference, whether it be received at Waterloo or Chalk-farm.

There is a report that the Government intend, also, suppressing the schools of Pharmacy. Indeed, a Committee has been already appointed for the purpose of collecting arguments in support of the project; but it seems hardly possible that a measure at once so injurious and irrational should find favour in the eyes of the Assembly, for the sake of economising a few thousand francs per annum.

M. Ricord was elected member of the Academy of Medicine, last week, by a respectable majority. For many years the admission of this distinguished surgeon was adjourned, through a series of manœuvres intelligible only to those who know the miserable jealousies which so often distract, I might say degrade, our Profession. Justice, however, has at length been done; and we cast a veil over the sins of the recalcitrant.

The scientific news of the Institut and Academy, for the current week, does not present much of interest or importance. They had a simple question relative to an homœopathic mission into Germany to decide; but, "as two of a trade can never agree," so our two learned bodies are almost always of opposite opinions.

A certain Dr. Gourard had solicited from the Government a mission to study the effects of Hydropathy in Germany, in order to enlighten his fellow countrymen thereon. The request having been favourably received in high quarters, was referred, as usual, to the Institut and the Academy of Medicine. The former answers, "Yes;" the latter, "No." After this, who shall say there is wisdom in a multiplicity of counsellors?

ASSIMILATION OF IODINE BY PLANTS.

In a former letter I embodied the substance of some observations addressed to the Institut, and relating to the quantities of iodine contained in certain plants which grow in running streams. Some additional facts of interest have been made public by M. Neyrac, apothecary at Dax. In this town there is a fountain at once remarkable for the limpidity and abundance of its water; its high temperature (140 Fah.), the quantity of nitrogen which is disengaged from it, and also the production of a plant—the *Anabaina thermalis*, which grows in it in very great abundance. This plant contains an immense quantity of iodine, and assimilates that substance with such avidity, that it leaves hardly a trace to be found in the water.

THE HEART'S MOTION ARRESTED BY GALVANISM.

Some experiments were recently performed before the Biological Society, for the purpose of clearing up certain doubts, which a well-known physiologist had thrown on the assertion of the Germans, "that the pulsations of the heart are suddenly and passively arrested by galvanising the medulla oblongata, at the origin of the 8th pair of nerves."

M. Longet denies the truth of this proposition, and affirms, on the contrary, that the heart has ceased to pulsate, because the stimulus has thrown it into a state of permanent contraction. According to M. Longet, the idea of the suspension of action in any organ at the moment the nervous system which animates it is powerfully stimulated, is opposed to all previous knowledge, and to actual experiment.

The demonstrations of M. Brown-Sequard before the Biological Society, leave no doubt of the fact announced by the German physiologists, and at the same time of M. Longet's error. When the two extremities of a powerful galvanic battery were applied to the medulla oblongata, close to the origin of the eighth pair, the pulsations of the heart ceased; and when the galvanism was kept up for a short time, the heart became black and swollen, because the blood flowed constantly into it, yet was not expelled.

On the other hand, if one end of the machine be connected with the heart, and the other with the root of the vagus, then the heart really contracts and ceases to beat, as described by M. Longet. The mode of applying the stimulus, then, makes the whole difference. There are few Societies in Paris which can boast of such a number of working and clever young men as the Biological. It was established under the auspices of M. Rayer; meets once a-week, and seldom separates without having furnished something of interest, if not of importance to medical science.

TRANSMISSION OF SYPHILIS FROM THE INFANT TO ITS NURSE.

Can an infant labouring under congenital syphilis infect its nurse? Such is the thorny and disputed question which M. Bouchot, one of our hospital

physicians, endeavours to solve. Many of the best writers allude to the point, but do not attach to it the importance which it merits.

M. Cullerier wrote an article on the subject in the Medical Journal, and concludes for the affirmative; but only one of the cases brought forward by him is beyond all suspicion. M. Bouchardat likewise published a very striking case, in which an infant infected two healthy nurses successively. These two cases, in the judgment of M. Bouchot, are sufficiently clear, and prove, beyond doubt, the possibility of infection. He has seen, and relates from the practice of M. Rayer, several other cases of apparent transmission; but confesses, that, although the probability of infection was great, it was not proved beyond all suspicion.

ERUPTIVE FEVERS WITHOUT ERUPTION.

This, also, has been long a disputed point in medicine, yet we have now here a great number of cases here which appear to leave no doubt that the eruptive fever of measles or scarlatina may exist without any eruption. Both these exanthemata are very prevalent at the present moment, and in a great many cases all the premonitory symptoms, with the fever, exist, yet the most minute examination fails to detect any trace of eruption. In a certain number of cases, also, the peculiar bronchitis of measles was present, and soon gave way under the use of blisters; so quickly, indeed, that it was impossible to mistake its exanthematous origin.

ANTIDOTE TO CHLOROFORM.

M. Duray has addressed a Memoir to the Academy of Sciences, with the object of showing that oxygen may be successfully employed to combat the accidents produced by chloroform and asphyxiating gases. Oxygen may be breathed for several hours without giving rise to any inconvenience. When breathed in conjunction with chloroform, it retards and weakens the action of this latter substance, diminishing its soporific influence. It also counteracts, or, rather, dissipates, the secondary effects of chloroform; and hence it should be employed without delay, whenever we find these secondary effects assuming a dangerous character after the use of the agent has been suspended. M. Duray, indeed, goes further, and proposes the use of oxygen after all cases treated with chloroform. The deleterious influence of that substance on the blood is thus speedily removed, and the headaches, feebleness, &c., dissipated with them.

SCOTLAND.

[Edinburgh Correspondence.]

CRETINS AND IDIOTS.

We have had a visit here from Dr. Guggenbühl, Director of the establishment at Abendberg, in the Canton of Berne, for the cure of cretinism, which has turned our attention to the subject of idiocy in general. It is perhaps true, as Dr. Forbes has remarked in his "Physician's Holiday," that at Abendberg the term Cretinism is not so much understood as signifying idiocy conjoined with goitre, as idiocy in general. But if, out of the cases treated at Abendberg, a part only belong to true cretinism, the rest falling under the head of general idiocy, while a certain proportion of the whole are cured when the treatment is begun at an early period of life, the fact is all the more interesting to us. And it is, indeed, far from improbable, on other grounds, that at least some of the forms of idiocy which occur in this country may be as curable, if taken in time, as the cretinism of Switzerland. Dr. Guggenbühl was present at the meeting of our Medico-Chirurgical Society on the 1st of May, when his friend Dr. Coldstream read a paper giving an account of the observations made on cretinism at Abendberg, and the methods of treatment pursued there, and Dr. Guggenbühl afterwards addressed the audience in French, for the purpose of making some farther explanations. On a subsequent day a meeting of those friendly to the extension of his plan was convened, at which our Lord Provost presided, when a Committee was appointed to communicate with Dr. Guggenbühl on his return to Abendberg, and to collect subscriptions for the promotion of his benevolent design.

Dr. Guggenbühl distinguishes four varieties of cretins:—1. The atrophied cretins; 2. The ricketty cretins; 3. The hydrocephalic cretins; 4. The cretins diseased from birth; the cases of these last being, as might be supposed, the least tractable. His plan of treatment is to remove the affected children as early as possible from the confined valleys where the disease prevails to his hospital, situated at an elevation of 4,000 feet above the level of the sea. Here the first attention is directed to the more perfect nutrition of the body, and then the process of education is commenced, and this consists in the diligent use of all the means, suited to the several ages of the patients, by which the attention can be awakened and the dormant faculties aroused. Speaking trumpets are employed to stir up the sense of hearing; the letters of the alphabet of large size, cut out in wood, and, when these fail, characters written with phosphorous on the wall of a darkened room, and pictures of objects placed side by side with the things represented, to exercise the sense of sight, and corresponding means to improve the senses of smell and taste. Among the other means resorted to are music and gymnastic exercises. Of the medicines we may mention the iodide of iron, some other preparations of iron, sulphate of quinine, and cod-liver oil.

Not to enter on any special theory of the production of true cretinism in the valleys of Switzerland, it seems certain, at least, that it is a disease of an atrophic character; that it results from an imperfect nurture of bodily organs, and in particular of those which are concerned in common acts of sense and intelligence. The proof of this is, that all that is necessary to cure this kind of idiocy, when it is taken at a sufficiently early period, is to place the unfortunate patients under merely physical circumstances more favourable to bodily health than those which exist in the situations where cretinism prevails. Though the particular cause cannot be satisfactorily pointed out, which, in the low, confined valleys of the Alps, and in other similar situations, prevents the central organs of the nervous system from taking on the nourishment necessary for their due development, yet it is nothing more extraordinary than what takes place in other diseases—for example, in rickets. Rickets plainly is an atrophic disease of the bones; that is, a defect of development in the osseous system in childhood, owing to an inability in the body to derive the due amount of the proper nourishment of that system from its ordinary sources; and cretinism, which appears to be often combined with rickets, presents a completely analogous character. It is not probable, that even the knowledge of the particular physical cause which so interferes with nutrition as to produce cretinism would enable us to do more for its cure than to place the patient, before the disease had gone too far, under such more favourable circumstances as Dr. Guggenbühl has described. And it can hardly be doubted, from what we know of analogous cases, that the frequency of the disease, even in the valleys where it is most prevalent, would be greatly diminished were the habitations, diet, and whole manner of living common among the inhabitants placed on a footing more in accordance with general sanitary principles. In this view there is nothing inconsistent with the fact, that but a certain small proportion of the infants born in each valley become the victims of cretinism. In the general theory of the production of disease, it must be admitted that the whole members of a large community are not unfrequently subjected, in a nearly equal degree, to the exciting cause of a disease, though but a small portion finally become affected. And the only explanation which pathology can offer at present of such a phenomenon, for example among the infants of the Swiss valleys, is that, while all the infants are exposed to the deleterious cause, those escape who, being possessed of a more vigorous vegetative life, are able to resist, and in spite of the unfavourable circumstances in which they are placed, to assimilate from their food enough of material for the due development of their several bodily organs.

The important question, however, is, how far the inferences drawn from the history of cretinism are applicable to the mass of idiotism known to exist in this country. Common though goitre is in many districts of Britain, it does not appear that any connexion has been traced between its prevalence and the more frequent occurrence of idiocy in the same districts. Thus, the idiocy of this country cannot be set down at once as even strictly analogous to cretinism. It most probably is a malady which, for the most part, has a deeper root in the human frame than cretinism. We observe that Calmeil, no mean authority on such subjects, speaking of idiocy in general, says, that it is in vain to attempt its cure, and that the only way to bring down the amount of idiocy and imbecility is to prohibit the intermarriage of parties so affected, and even to enforce celibacy on the great number of persons whose intelligence is naturally feeble or accidentally impaired by disease. A law for such a purpose, in the present state of the world, is a very chimerical idea. But Calmeil here takes too desponding a view of the matter; he must think that idiocy is uniformly the result of an imperfect development, during intra-uterine life, of the organs on which intelligence depends. But this, as it appears to many of us, is the very point on which proof is required, namely, whether any portion of the idiocy of this country be the result of mal-nutrition after birth, or, if the mischief be done before birth, whether it be always of such a character as must prevent a complete or partial remedy from being applied. The idea of curing all forms of idiocy, at however early a period aid is applied, cannot be entertained for a moment; but, as idiocy and imbecility exist in all degrees and shades, it can hardly be doubted that much good would be the result of making the attempt at once to improve the bodily health and to call forth the mental faculties at the earliest possible period of life. Were institutions, however, set on foot in this country for such a purpose, there would be much need for reserve in the reception of the results first announced; so easy would it be to mistake the mere tardy development of the faculties in an infant for a real defect, and thus to set down as cures, cases which required nothing but time to put the intelligence on a level with that of infants in general, or even, as would doubtless sometimes happen, far above the ordinary level. The accounts which have been hitherto published on the subject of the education, rather than the cure of idiocy; for example, of those made at Paris by M. Seguin, at the asylum of the Bicêtre, and near London, at Highgate, though far from settling the many intricate points of this subject are, so far as they go, very satisfactory. In the meantime, the necessity for inquiry cannot be too much urged on the Profession, and particularly on that part of it to which the care of the first years of infancy is usually committed.

SELECTIONS FROM FOREIGN JOURNALS.

POST-MORTEM RESEARCHES MADE IN THE CASES OF CHOLERA AT PADUA.

By Dr. LEOPOLD BIAGGI.

Such is the title of a paper in the *Annali Universali di Medicina*. The ideas of this gentleman are somewhat original, and, as such, deserving mention.

After some general remarks, having reference more especially to the heart, and particularly the auricles, he remarks:—

"If the right auricle is attacked with inflammation, it does not take up the blood as before, the movements of its walls being irregularly and imperfectly made. As a result of this inflammation of the auricle, the blood stagnates in the abdominal vena cava, the hepatic and portal veins, &c. The blood accumulates within the superior cava also and the brain, whence arises a slowness of the intellectual faculties and a general debility. The blood becomes cold and dark, and, in consequence, the face becomes bluish. The general langour increases; gradually the pulse begins to fail at the wrist. The serous or vaporous exhalation within the cellular tissue is no longer effected; gradually the face shrinks, and the other parts of the body lose their roundness.

"In like manner, the coronary veins of the heart become engorged as easily as the two cavæ, and for this reason, that the heart, or, rather, properly speaking, the two ventricles of the heart, become retarded and are slower in their movements. Thence

follows an extraordinary accumulation of blood in the vena azygos, which can well give rise to engorgement of the spinal medulla, and thus be the cause of the shivers and spasms, and, if the occasion be favourable, also induce spinitis."

The Doctor then proceeds to give the special characters of cholera, as distinct from those of diarrhœa, and illustrates his position by adducing examples of *dry* cholera. He alludes, also, to the examination of the heart after death, and the caution to be observed in so doing. The great care necessary in manipulating such delicate organs as the auricles, and in noting their colour, or any milky, or fibrinous exudation about them. All this is best done by examining the heart *in situ*, and then washing the parts gently in water.

He then remarks, that three principal appearances were constantly found in all cases of cholera observed at Padua :—

"1. A swelling of the right auricle of the heart, resisting pressure, the blood within black, grumous, abundant, and generally more or less firm.

"2. Serous exudation in the pericardium, while the bladder was empty of urine.

"3. Erysipelatous or phlegmonous redness of the auricles.

"This erysipelatous redness is sometimes very faint, sometimes more marked, sometimes uniform, sometimes striated, always made up of a number of small vessels, most closely twisted and interwoven, and it is to the presence of these vessels that the red colour of the two auricles is due, the natural colour of which is white, with a cast of blue.

"In the phlegmonous inflammation we have an injection of the vessels existing in the thickness of the parietes of the auricles, and also in the simultaneous swelling of these parietes, which swelling may be more or less apparent.

"When the erysipelatous inflammation is present, it is necessary to mark well if it be slight; because, although it may not be the cause of death itself, nevertheless it is an inflammation which developes the proper external and clinical characters of cholera —it is that which will mask the other complications of disease that may attack the patient—that which may make cholera appear an asthenic disease, and thus prevent the Medical man from bleeding when it occurs; more especially as, the vein being opened, the blood escapes with difficulty.

"In phlegmonous inflammation of the right auricle the cyanosis is intense, and increases with rapidity; whereas in erysipelatic inflammation of the same cavity we may have some amelioration in the form of cholera, and the cure is far more easy than in the phlegmonous variety. . . . . .

"When the cyanosis is intense, and continues up to the period of death, it is highly probable that the *post-mortem* will reveal the presence of phlegmonous inflammation of the right auricle of the heart, or at least of a well-marked erysipelatous inflammation."

In speaking of what might be called "cholera *foudroyant*," he opposes the opinion of some Medical men, who regard these cases as proof that the blood is essentially poisoned in this disease, and so kills the heart. He cites, amongst others, a case in which the disease was present, and accompanied by its most marked symptoms, with complete algidity, and where the pulse has failed at the wrist; and yet the heart was heard by the stethoscope to beat with more than natural frequency, proving that the organ still maintained its vitality.

After giving several other cases in illustration of his position, he makes the following recapitulation :

From the 1st of August to the 9th of September, 1849, 73 choleraics were admitted in the "Casa di Forza" in Padua; 45 of these died, and were all examined after death. The following were the *post-mortem* appearances in general observed—

1. External injection and tumefaction of the meninges of the brain.

2. Serous effusion under the pia mater, and in the ventricles of the brain.

3. The membrane itself marked with a milky opacity, soft and recent in character.

4. Constriction of the pia mater around the spinal medulla, close beneath that portion of it usually called the pyramidal portion,—the pia mater itself being more rigid, and occasionally opaque.

5. Serous effusion within the theca vertebralis, between the spinal medulla covered by its pia mater, and the large membranous tube formed by the arachnoid and dura mater.

6. An extraordinary vascular injection upon the front of the spinal medulla; a faint, milky, recent opacity of the pia mater or arachnoid; in one instance only marked by a distinct redness, with an extraordinary number of vessels extending within the cinereous substance.

7. Marked gastritis, extraordinarily intense, the redness produced by vessels and ecchymosis of the mucous membrane; the parietes of the stomach tumid; numerous patches, more or less elevated, puffed up, pale or red, with an extraordinary quantity of what appeared to be mucus, and a large crop of shreds, which appeared to be a secretion from the coagulated vessels; the mucous glands frequently swollen and protruding.

8. Very frequently duodenitis, and usually marked with the same distinct characters.

9. Colitis, in every case the mucous glands tumid, with their mouths open.

10. Enteritis, in which some of the intestines were filled with what appeared to be a white-reddish water, with a large quantity of mucus and shreds floating in it.

11. The surface of the mesentery was, in all cases, streaked with the finest scarlet redness, made up by the smallest vessels and red points, very often slightly tipped as if with a milky opacity.

12. Constantly the urinary bladder was contracted, thickened so as to look like the uterus, not containing the slightest quantity imaginable of urine, with coats contracted as those of the uterus; the internal surface pale, with a very small quantity of a whitish turbid fluid, and sometimes streaked with ecchymoses.

13. On two occasions, as far as I remember, I observed the left kidney, when seeking for the cœliac plexus, to be full of white granules, soft, and small as the seeds of a fig; the right was never examined.

14. The gall bladder was moderately full of bile; generally, however, thicker and greener than usual.

15. The lungs flabby, crepitant as without blood, at least anteriorly, shrunk up and closely applied to the pericardium, so that four fingers could be easily passed between the inner surface of the ribs and the lungs; the surface sticky, as they might have been if covered over with a gummy varnish.

16. The pericardium was twice found recently adherent, as by inflammatory shreds, to the cardiac surface, in one instance to the lung.

17. Serous effusion in the pericardium.

18. The external membrane of the heart (esocardium) was opaque, milky white, soft, for the most part on the anterior surface.

19. A redness of a scarlet shade, made up of minute, very much crowded vessels, upon the surface of the heart.

20. An enormous number of vessels upon the surface itself of the heart; the larger being round, engorged with black blood; the smaller being red, as if they were full of a florid arterial or violet coloured blood.

21. Occasionally deeper, a redness and ramollissement of the anterior part, and occasionally in the infundibulum of the heart.

22. Inflammation (*i. e.*, traces of recent inflammation) in the right auricle of heart, *always situated in the vicinity of the vena cava superior, and the other right pulmonary veins*, characterised by a vascular, very close and very minute injection, such as we usually see in membranous inflammations; full also of a soft exudation of concrete lymph of a dirty yellow or white colour, which made the cavity opaque; also ecchymoses, with very short and softened shreds, and some softening of other portions of the cavity. The inflammation appeared to be either erysipelatous, or slight, intense, or phlegmonous. In those cases of plegmonous inflammation, there was generally, up to the time of death, intense cyanosis, and the characteristic signs of cholera were usually well marked.

25. An external swelling and a great enlargement of the right auricle of heart (usually more intense according as the inflammation was greater), produced by black blood within, dense, oily to the touch, frequently grumous, and also intermingled with fibrinous shreds or fibrinous yellow coagula.

24. A swelling and enlargement of the vena cava superior, produced by the same kind of blood, within that portion of the vein covered by the pericardium, and outwardly opaque.

25. The posterior parietes of the two auricles of the heart were red; or showing some analogous lesion upon them, or upon the left pulmonary vein, as already described, Nos. 22 and 23.

26. The coronary vein protruding, and full of dark black blood; sometimes also opaque, and externally injected with small blood-vessels.

27. The trunk of the vena azygos full of blood.

28. The trunk of the aorta contained within the sac of the pericardium, was outwardly very much injected, and within more yellow than usual, and containing fibrinous coagula. The pulmonary artery presented the same appearances, only outwardly it was more thickly opaque.

29. The blood contained between both arteries and veins was black, dense, as if only to the touch; sometimes exceedingly thick, and slightly grumous.

30. The vena cava inferior, and the vena porta appeared to be in three or four instances only (if my memory serves me,) somewhat opaque.

31. I was enabled four or five times only to examine the cœliac and ganglionic plexus. All I can say of these is, that in two cases of most marked cholera, and in whom the algide symptoms were very remarkable, they were perfectly healthy.

The constant appearances observed were :—

1. The crepitant, shrunk up and sticky lungs. 2. Swelling and enlargement of the right auricle, of the vena cava superior contained within the pericardium. 3. Inflammation of the right auricle of the heart in the situations indicated. 4. Effusion within the pericardium; whereas, the other cavities, when inflammatory traces were not visible on their surface, were always perfectly dry; the urinary bladder always empty, at least of fluid. 5. The urinary bladder was also always diminished in size, like a uterus. The parietes half a finger thick. 6. Gastritis appeared to be a constant lesion, as also duodenitis. 7. The stomach full of air, where it did not contain other fluids or substances swallowed during life. 8. The blood black, grumous, dense, oily to the touch.

The following is the treatment recommended by Dr. Biaggi, and on which he places most reliance. It will be seen to bear upon the pathology of cholera he seeks to establish :—

1. In undertaking the treatment of a case of cholera, we should act with promptitude; and the first thing is a copious bleeding. 2. After the bleeding a cold bath. 3. After the bath the application of a blister at the lower part of the chest. 4. A large cataplasm of linseed meal to the abdomen. 5. If the diarrhœa be present, starchy enemata to check it. 6. Drinking largely of tepid water to promote the vomiting, after which the patient usually feels better. 7. An aloes pill, and sugar and water to drink. 8. The baths, and tepid drinks to promote sickness, if it recurs in the day, should be repeated, and also the clysters. 9. If the preventive venesection cannot be performed, in such a case the baths, &c., are useful, but the chance of cure is doubtful. Indeed it is difficult, with such extensive lesions present as those before noted, to know what other remedies to oppose; leeches do not bite, &c.

Of those complications which usually occur in the convalescence of the patient, there are two principal :—

The first a constant complication of gastritis and gastro-entritis The second is the engorgement of the venous and arterial portions in the brain, serous effusion, inflammation of the membranes of the brain or spinal chord, constriction of this latter, &c.

The premonitory symptoms which usually indicate a lesion of the spinal medulla, are agitation, restlessness in the patient, afterwards a burning pain in the back, cramp, pain across the loins, drawing inwards of the globe of the eye within its socket. Those of a cerebral affection, injected eyes, which are half-closed, general apathy, somnolency, slowness of the movements, heat of forehead.

In these cases, wherever these symptoms make their appeasance, he gives aloes, tartar emetic, or calomel. Enteritis he has seen produced in cases of

cholera by the presence of worms, thus pointing out the propriety of giving aloes.

"In the period of reaction, we may expect pericarditis and its symptoms, troublesome hiccough, fever, dry and hot skin, buffed blood, sallowness of complexion, and the cerebral phenomena. In two bodies I have found pneumonia present."

In these cases the Doctor recommends free bleedings, both because there are active inflammations to be treated, and because there is always, more or less, a trace of the choleraic symptoms behind, as exhibited in the colour of the skin and cerebral engorgement, which are effectually removed by bleeding.

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THE MEDICAL TIMES.

SATURDAY, MAY 25, 1850.

The Journalist who seeks to represent truly the varied aspects under which the Medical Profession presents itself, has no light task. He must regard the Profession, first, as a scientific unity, the Members of which have all one sole and common object, the advancement of Medical knowledge. He must then look upon it as a social organization, which stands in various relations to the great framework of society. Then he must divide this organization into its component parts, and must recognise the duties, claims, and rights of each. He must continually preserve the balance between the parts themselves, and between them individually and the society they serve. He must endeavour so to realise the abstract scientific unity and the practical diversity of the Profession, that he may faithfully, and in due proportion, hold up to the whole, and to each component part, a mirror true to nature and to fact.

In appearing thus as the representative, advocate, and organ of his Profession, the Journalist must not forget, that his duties as a Medical man form part of, and finally merge into, and are comprehended in, his duties as a citizen. In labouring for the division of society to which he belongs, he must not forget that larger organization, of which this section is a part. He must not sever the ties which should be inseparable between this section and the whole. He should present to himself clearly this definite principle, that, to promote truly the interests of his Profession can only be done by promoting the welfare of the community at large; and that to suffer class-interests to bias his opinions to the prejudice of society in general, can only eventually injure those whom he has so injudiciously attempted to serve.

When, descending from general principles, we more attentively regard the wants of society and the present position of the Practitioners of Medicine, it must be admitted that the most able Journalist of the day might feel some difficulty in properly dealing with so complicated a problem. On all sides he will find unusual and increasing demands made upon the resources and appliances of the Profession; he has to indicate what amount of reason and of justice has prompted these appeals; and how, if reasonable and just, they may be answered. On all sides, he will hear, from the ranks of his brethren, complaints of the unjust and injurious organization, and of the defective law, which regulate the proceedings of the Profession. Continually, also, he has to unmask the pretenders to the knowledge of his noble science, and to scourge back from the domain of legitimate Medicine those false prophets who have attempted to use some portion of its truths for personal and selfish ends.

But, difficult as these duties may be, the Profession of Medicine possesses within itself resources which could fulfil them all, were it not for one vast and growing evil, which has cramped the energies of the most energetic, and has disheartened the hopes of the most sanguine. The Profession is as a house divided against itself: where there should be concord, there is variance; where confidence, there is distrust; where support and sympathy, there is a cold indifference, or even a factious opposition. The man who proposes to himself to serve his Profession honestly and truly, has to encounter a storm of complaints and querulous assaults from the very men who would be, if they could comprehend their own interests aright, his most untiring and energetic supporters.

These quarrels, in the very heart and centre of the Profession, have contributed materially to injure it with society at large. There has been no fixed principle, no unity, no consistency, and consequently, no strength, in the attitude which the Profession has assumed towards the public. Therefore, although endowed with undeniable powers, and possessed of attributes which, allowed fair play, would be indeed wonder-working, the Profession has yet seen incompetent persons assume its duties, enjoy its prerogatives, claim the homage due to it only, and appropriate the position which had been won by its proper labours. Therefore, also, the Profession has seen its hardworking members degraded into alliances and intercourse with persons who legitimately ought to serve, and not to rule. Therefore, also, the Profession has seen the doubts and scepticism which arise in the public mind, from imperfect knowledge and an insufficient and vain assumption of truth, assume the formidable shapes of wide-spreading quackery, which now cover the land, injuring the estimation, and lowering the hard-earned profits of every Practitioner in the kingdom. Had the Profession been true to itself, these evils, which weigh so heavily upon it, had never happened. We should never have seen the health of the body corporate, disdainfully confided to men who had not been grounded in the necessary knowledge of the body individual. We should never have seen half-educated grocers and dull-pated butchers sitting in judgment on the conduct of scientific gentlemen, whose ill fate had made them Officers of Unions. We should never have seen that most intelligent class of Naval Assistant-Surgeons condemned to indignities which no other officers in Her Majesty's Service would endure. We might possibly have seen those giant quackeries of Homœopathy, Hydropathy, or Mesmerism, uttering their atrocious lies, but we should have seen their scanty audiences composed only of the foolish, the idle, and the half-educated. The Profession has not been true to itself, and, therefore, not true to society, and society has punished it for its error.

In uttering this condemnation upon the Medical Profession, we, as one of its organs, have no desire to screen ourselves from our share of blame. We admit, that one great, nay, the greatest, cause of disunion and dissension among us, has been from a want of truth and honest dealing on the part of the representatives of Medical opinion. Had there been an efficient Medical Press, the wrongs of the Profession had years ago been healed. But for the last few years, while the Medical Press has had infinite power for evil, it has appeared to have had none for good. No man can point to any just social or political claim which the Profession has ever won through its Press. The only results we now observe, after ten years of ceaseless agitation for Medical reform, are a bad and malicious spirit of class-interest, a sea of opposing opinions, in which each man clings with frantic vehemence to his pet design; an utter and inextricable confusion, which appals the Statesman, disgusts the Government, and utterly disconcerts every one who attempts to cast into order the raging elements of this heaving chaos.

While, however, we give utterance to this censure against the Medical Press, we wish to point it more especially against one individual, who has, we firmly believe, done more harm to the Profession, which has had the misfortune to number him among its members, than the whole tribe of Homœopathists and Mesmerists put together. Some day or other, Mr. Wakley may rest assured that he will undergo bitter penance for the way in which he has employed the vast opportunities he might have used for good, and has perverted for evil. To his baneful influence can be plainly traced many of our dissensions, and most of our difficulties. For, if all public questions had been temperately and wisely considered; if in times past the first thought had been the welfare of the Profession, and not the circulation of the *Lancet*, we should not now have been struggling, and perhaps struggling unsuccessfully, for public status and for individual rights. If the *Lancet*, which has been supported by the Profession, because its base money passed current for sterling gold, had employed the power it at one time possessed, in the proper consideration of the various forms of quackery which have wounded us so heavily, it is impossible but that the eyes of the public had been opened to the fallacies and absurdities of these charlatans. If Mr. Wakley's aim had been, not to pander to the worst passions of the Profession, and to increase the sale of his Journal by stimulating to the utmost the desire for vulgar gossip, but honestly and manfully to stand forth as the faithful adviser and advocate of his professional brethren, the *Lancet* might have done incalculable good.

An apt illustration of the usual tactics of the *Lancet*, may be presented to our readers. In the last Number of the *British and Foreign Medico-Chirurgical Review* appeared an Article on the relation of True Medicine to Empirical Systems. For a purpose of his own, with the design of injuring the Quarterly Medical Journal, and without considering the real injury he is inflicting on the Profession, Mr. Wakley comes forward with a statement respecting this Article, which is, throughout, nothing more or less than a systematic perversion of the writer's meaning. The opponent of quackery is converted by Mr. Wakley into the defender of the very systems which it was the object of the Article to expose. Some garbled sentences, freed from their context, form the text on which our Medical Mephistopheles suspends his unfounded accusations. The true advocate of the Profession is thus adroitly represented in the very character which he has done his best to hold up to the contempt and censure of his Medical brethren and of the Public.

We exposed fully, on a former occasion, this unfair and mendacious trick, and pointed out how dishonesty of this kind poisons the very lifeblood of our Profession. Our exposure has, so far, been sufficient, and no one is likely to trust the representations of the *Lancet*. Yet, as it is absolutely necessary that this wolf in sheep's clothing, this pretended ally, who really fights the battles of the enemy he professes to oppose, should be thoroughly unmasked, we shall next week return to this subject, and point out afresh to our readers how Mr. Wakley discharges his duties to his Profession, and what are the motives which dictate the leading Articles of the *Lancet*.

THE PROFESSORSHIP OF ANATOMY IN UNIVERSITY COLLEGE.

In explanation of a short paragraph respecting this Professorship, inserted in our last Number, a few particulars may be stated, in order to prevent any misapprehension. When Mr. Quain was elected Professor of Clinical Surgery, he retained a portion of the Professorship of Anatomy; Mr. Ellis, to whom the duties of the Chair were at the same time in part committed, being appointed Junior Professor. This gentleman, it is well known, had been Demonstrator for several years. Under this arrangement, Mr. Quain has lately given a portion of the Anatomical Course of Lectures—the part, viz., more immediately connected with Surgery. But at the end of the last winter term, wishing, it is understood, to confine himself exclusively to practical Surgery, he resigned his partial connexion with the Chair of Anatomy; and Mr. Ellis, who had been appointed Junior Professor for a limited period, which has lately expired, is now Professor of Anatomy. He was elected last Saturday.

We have been informed, that Mr. Quain, when finally withdrawing himself from the Anatomical department, presented to the College more than 400 drawings, and preparations amounting to nearly double that number. Among the latter are the Collection of Blood-vessels, (which may be said to form the basis of his excellent work upon the subject,) and an extensive series of osteological preparations, some of which are represented in the illustrations of the growth of bones contained in the last edition of "Quain's Anatomy." The preparations are to be added to the Museum of Human Anatomy in the College.

COLLEGE OF SURGEONS. PROFESSOR PAGET'S LECTURES ON INFLAMMATION.

The Annual Course of Six Lectures delivered at the Royal College of Surgeons by the Professor of Anatomy and Surgery to the College, has just been completed. The subject which Mr. Paget has this year selected is that of Inflammation; and perhaps none could furnish a more appropriate sequel to the series of Lectures delivered by him the three preceding years. The general tendency of the present course has been to show, that Inflammation is to be studied, not so much as a peculiar and specific disease, as an altered mode of nutrition in a part,—the inflammatory process being chiefly a perversion of the ordinary process of nutrition induced by derangement or failure of one or more of the several conditions requisite to healthy nutrition. In the development of this view, the first Lecture was occupied by a description of the inflammatory state as affecting the several parts chiefly engaged in the process of nutrition. Mr. Paget commenced first with the blood-vessels, and described the various changes which they undergo in and about a part which is the seat of inflammation, namely, their enlargement and fulness; then their change of shape and the occasional formation of aneurismal dilatations in their distended walls. These several points were illustrated by excellent diagrams depicting the condition of the blood-vessels in the inflamed wing of the bat, as seen with the microscope. Among the several new facts which Mr. Paget brought forward in this part of his Lecture, we were particularly struck with one—namely, that previous to the enlargement which the blood-vessels undergo when inflammation has been excited in a part by mechanical irritation, the small arteries, and also the small veins, of the irritated part manifest a decided contraction, whereby their diameter is materially reduced, and frequently remains so for a considerable period. This contractile power of the veins has, we believe, never been noticed before. The state of the blood in the inflamed part was then described—namely, its slow rate of movement and partial stagnation, the crowding of its red corpuscles, the supposed accumulation of its white corpuscles, which Mr. Paget showed to be incorrect, and then the general effects of the changes of the retarded or stagnant blood. The important information which Mr. Paget afforded on these and other points relating to the alterations which the blood undergoes in an inflamed part, were derived from repeated microscopic observations on the transparent tissue of the bat's wing. It appears strange that so little advantage has been hitherto taken of this favourable structure for examining in the warm-blooded mammalia the condition of the blood and blood-vessels during the inflammatory process, for it obviously possesses many advantages over the web of the frog's foot, and the other transparent parts of cold-blooded animals. From the blood and blood-vessels Mr. Paget passed to the consideration of the probable changes ensuing in, and the influences exercised by the nerves in an inflamed part, and alluded to the transference of their morbid state to other nerves, whereby certain forms of sympathetic inflammation, *e. g.*, the conjunctivitis ensuing in one eye, consequent on inordinate use of the opposite eye, as in microscopic investigations, may be explained. Then he proceeded to consider the influence exercised by the proper elements of the inflamed part in determining the phenomena of inflammation, showing the defective nutrition undergone by these elementary parts during the inflammatory process; and with this his first Lecture terminated.

The second Lecture was occupied with the consideration of the general effects of inflammation, including the various products effused during the inflammatory process. The general characters of inflammatory lymph, with the varieties which it presents under different circumstances, and the conditions determining these varieties, were considered at some length.

In the third Lecture, the changes undergone by the lymph products, in their development towards higher states of organization, as the fibro-cellular, osseous, epithelial, fibrous, and other tissues, were minutely treated of.

The fourth Lecture was devoted to the consideration of the degeneration and diseases to which the lymph-products of inflammation are liable. From the novelty of the views propounded, and the variety of facts brought forward, this was one of the most interesting Lectures of the course. Hitherto, the various steps through which the elementary parts of the body, whether healthy or morbid, gradually pass, as they degenerate from their highest point of development to decay and death have been almost entirely overlooked. The successive changes by which they arrive at their full state of perfection have received very careful investigation, but beyond this point they have scarcely been traced. Mr. Paget, however, has shown that the elements of both healthy and morbid tissues pass through, in their degeneration, a series of changes as striking and important as those by which the process of their development is characterised. Many of the changes attendant on the decay of parts, as far as they are yet ascertained, were mentioned by Mr. Paget, and then a detailed account was given of the various kinds of degeneration undergone by the products of inflammation, namely, their withering, their liquefaction, and disintegration, and their fatty, calcareous, and pigmental degenerations.

The fifth Lecture was occupied with an account of the effects produced by inflammation on the part in which it is seated; *e. g.*, the softening of inflamed parts, as shown in the brain, bones, and ligaments,—fatty degeneration, as in the liver and kidney, absorption, ulceration, and ejection of tissues disintegrated after degeneration, and their death in gangrene. He alluded here to the supposed corrosive power exercised by the purulent products of inflammation on the tissues with which they are kept in contact; and he

showed that such effects ensue only in cases in which the vital power of the tissue acted upon is reduced below its natural standard, and that healthy tissues are never similarly affected by the purulent matter. The remainder of the Lecture was occupied with an account of the recovery of parts from the effects of inflammation, namely, their induration, contraction, adhesion, and the like.

The last Lecture was, on many accounts, the most important and most instructive, for it was dedicated to an exposition of the Professor's view of the nature and causes of inflammation, and we were glad to see on the occasion an audience fully as large as any we ever saw assembled in the College Theatre. It would be doing an injustice to attempt to state, in this short notice of the Lectures, what Mr. Paget's views are on this subject; but we may observe that, by an abundant array of facts, set forward with the closest logical reasoning, he made it most probable that inflammation should be regarded as an act in which two separate processes take part in a greater or less degree in different cases, the one a destructive process, consisting in a defect of nutrition, consequent on the failure of one or more of the conditions essential to the nutritive process, the other a productive process, characterized by the formation of new products, in large quantity, yet of very low organization. According as the one or other of these two processes preponderate, so may the several varieties in the process of inflammation be explained. With the development of these views, and the opinion necessarily resulting from their truth, that the proximate causes of inflammation must be ascribed to qualitative changes of the necessary conditions of normal nutrition, this valuable series of lectures was brought to a conclusion.

We have no hesitation in expressing our conviction, that the subject of inflammation has never before been handled in so masterly a manner, and that never before have such clear and probable views of the nature of the inflammatory process been brought forward. We only regret that the number of lectures was necessarily so few, for, from the condensed form in which the numerous facts, and the generalizations deduced from them, were stated, we feel assured that the subject would have been even more strikingly developed out of the vast stores of knowledge evidently in Mr. Paget's possession, had greater space for this been allowed. As it is, however, the manner in which the subject has been dealt with will tend materially to augment and extend the already large and widely-spread reputation which the former courses of lectures, delivered in the same place, have procured for Mr. Paget; and we feel sure that the Council of the College must feel the gratification, to which the presence of so many of their members at the lectures bore testimony, of having the honour and dignity of their appointment so ably upheld.

MR. WAKLEY'S RETIREMENT FROM PARLIAMENT.

The *Times* of the 23rd inst. contains a copy of a Letter addressed by Mr. Wakley to his constituents, in which he virtually resigns his office as representative of the Borough of Finsbury in Parliament! There has been, for some time past, a movement among the electors of that borough, for the purpose of removing the honourable gentleman from his distinguished position, and he, anxious to avoid an unceremonious ejection, and to save his dignity, has anticipated his sentence by what he would, without doubt, wish to be considered a *voluntary* resignation. He begs only that he may be permitted to retain his duties until the next Session of Parliament.

However sad may be the circumstances under which the retirement of Mr. Wakley from public life has occurred, whatever melancholy condolence we may feel for an individual who, in disappointment, is bidding farewell to an active career, we do not believe that the Profession generally will consider that his retirement from Parliament will be a disadvantage to their interests. Anxious to push his own opinions and prejudices into prominence, he did not fairly represent the wishes of his brethren. A man of a different character, of more public virtue and devotedness to the Professional welfare, is, however, a want in Parliament. The Profession should earnestly consider the means of supplying it. They have been agitating out of doors for many years; but until they obtain a steady footing on the floor of the House of Commons, we fear that a comprehensive and equitable Reform of the Profession will not be accomplished.

The lawyers succeeded, on a recent occasion, in carrying a Resolution in the teeth of the Government; and if the Profession were honestly and adequately represented in the House of Commons, every measure of importance to their interests would be subjected to a fair discussion, and justice would be done to them, both in their Professional and public relations.

We shall recur to this subject, for we consider it to be essential to an effective agitation of the Medical Reform question.

THE UNIVERSITY OF ST. ANDREWS.

In our last Number we published the names of several gentlemen who have lately graduated at St. Andrews. We take the opportunity of stating our satisfaction at the improved method of examination which is now adopted in this University. In the olden time, it is well known that the degree was granted after a mere formal examination. The late Dr. John Reid, however, instituted a more stringent mode of testing the acquirements of the candidates, and the present Chandos Professor, Dr. Day, has, we understand, followed vigorously in the steps of his predecessor. The examination at St. Andrews extends now over at least two days, and is conducted partly in writing, partly orally. The knowledge of the Candidate in every branch of Medicine is carefully tested, and no one can now expect to gain his diploma unless he is able to satisfy some very keen and experienced examiners. At the last examination, nineteen gentlemen presented themselves, of whom sixteen were successful.

We trust that this change will be fully carried out, and then, we doubt not, that the St. Andrews degree, which is already a very different thing from what it formerly was, will be accounted a most honourable distinction.

DR. GUGGENBÜHL.

We beg to call the especial attention of our readers to the communication in this number from our esteemed Edinburgh correspondent. We do this for the purpose of announcing that Dr. Guggenbühl, the celebrated and philanthropic Director of the Alpine retreat on the Abendberg, in Switzerland, for the treatment of infant cretins, has undertaken to illustrate at greater length, and to publish in this Journal, a series of papers upon the management of idiots. At the present time this subject is exciting great attention in England; Dr. W. F. Browne, the distinguished Director of the Royal Crichton Institution, near Dumfries, has lately visited the Asylum for Idiots in the neighbourhood of London, to obtain the necessary information to enable him to introduce the system—we doubt not with the happiest effects—into Scotland; and whether we consider its novelty as a branch of Medical science, or its great importance, we are sure our readers will receive with much satisfaction the intimation we have now the happiness to make.

While on the subject of our varied foreign Correspondence, we may also state that

DR. SCHOEPF-MEREI,

The Director of the Hospital for Children at Pesth, and Professor in that University, will communicate to us a series of practical observations on the Diseases of Children. Dr. Schoepf-Merei is a high German authority upon the subject, concerning which he is to treat in this Journal, and his communications cannot fail greatly to interest and benefit our readers.

We may further avail ourselves of this opportunity to add, that we shall shortly publish a list of the contributors to the

NEW SERIES OF THE "MEDICAL TIMES."

Comprising names of the highest eminence in Medicine and the Collateral Sciences. From this, our readers will perceive the exertions we have been making to challenge and to defy competition; while they may place the most implicit reliance upon the authorities we shall introduce to them on the most important branches of Medical Science.

MEDICAL CHARITIES' BILL FOR IRELAND.

From some unexplained cause, there seems to have been a hitch in the passing of this measure. We trust for the purpose of considering the subject in all its many-sided bearings, and doing what is best. Some murmurs have reached the public ear, of Sir William Somerville going to the Upper House; we hope he will have completed the greatest boon conferred on Ireland this session before that event. On the subject of the present Bill, we have chronicled already the quiet equanimity of the Profession in the south. Since then, however, the men of the North have spoken out in rather unequivocal phrases. The Governors of the County Down Infirmary have taken the initiative, and in a Petition, the result of their deliberations, "the wresting of private property from the hands of its vested

owners" is made a crying grievance. The Petitioners, "during a period of seventy-five years," have supported and originally erected, they say, at a cost of some 6,000*l.* or 7,000*l.*, this very valuable Institution, and cannot see why it should now be taken from them. But we need scarcely say, in a measure such as the present, all private considerations must give way before a well-recognized public good. The Petitioners seem satisfied with the Central Board and Inspectors, but cannot look upon the new Governors likely to be created under the Act but as another serious infraction of the good faith on which they paid their money, and have worked together hitherto so harmoniously. We cannot but think, however, they are raising up false giants, like Sancho, when he finds the Princess Micomicona Dorothy—the poor Don, with his fine Mambrino's helmet, discovering another great giant in a couple of wine-skins—our friends will discover matters are not so very terrible as they imagine. "By the wording of the title" of the Down Infirmary, it reverts to the lord of the soil, a rather significant hint to Sir William Somerville; and further, a sum of 1100*l.* in hand the Petitioners are a little uncertain what to do with, not aware that a new clause in the Bill makes short work of it. We are glad our friends have spoken out, and, for ourselves, entertain every belief that the Government will adjust the present measure in the best mode possible. *Au reste*, the Infirmary Physicians generally throughout Ireland complain of the limited character of the Central Board, to which we have already referred, and wish, of course, what is only fair, that all present appointments should be undisturbed. These, indeed, we look upon as the cardinal points in the measure for the consideration of both Government and the Profession.

The 20th clause of the Act seems very objectionable to the Infirmary Attendants; and we go a long way with them,—the provisions of this part of the Act merely substituting supplementary workhouses for the present establishments, where none but those in attendance can know the impossibility of keeping the wards uncrowded, and where, under any arrangement but the present one, fit objects, not actually paupers, will find the greatest difficulty in getting attended. The point is a difficult one, but would be perhaps better left a matter of detail for the Board of Health. Our friends of the Apothecaries' Hall wish to get into the Board; but, for ourselves, we cannot see any great necessity for even Inspectors; a little kindness, and a very little physic, going very far with our poor people in Ireland.

HOUSE OF COMMONS, May 10.

THE FELLOWSHIP QUESTION.

Mr. Stafford asked the Home Secretary whether it was the intention of Her Majesty's Ministers to sanction such an alteration in the charter of the Royal College of Surgeons as should enable the Council to elect Fellows without examination.

Sir George Grey replied, that application had been made for an alteration in the Charter, but no final decision had been come to. There was no intention on the part of the Government, at present, to propose any alteration.

MEMORIAL OF THE NATIONAL INSTITUTE.

TO THE RIGHT HONOURABLE SIR GEORGE GREY, BART., HER MAJESTY'S PRINCIPAL SECRETARY OF STATE FOR THE HOME DEPARTMENT, &c., &c.

Sir,—The Council of the National Institute of General Practitioners in Medicine, Surgery, and Midwifery, beg again to address you on the subject of Medical affairs, and they respectfully offer a few additional observations for your consideration, with a view to explain certain statements, to correct a few inaccuracies, and more especially to point out some most important points of agreement, in the principles contained in the Memorial of the Provincial Medical and Surgical Association, when compared with the principles advocated by the National Institute.

The Council of the National Institute respectfully represent:—

1st. That the Provincial Physicians and Pure Surgeons, having distinct and separate interests, however competent to advise on matters relating to their own Colleges, are neither proper authorities, nor parties sufficiently disinterested, to advise or interfere with the education or the examinations of the General Practitioners, and the Council of the National Institute have reasonable grounds for believing that the representations made by the Provincial Medical and Surgical Association are not entitled to be considered the legitimate opinions, or as advocating the true interests of the General Practitioners in Medicine, Surgery, and Midwifery.

2nd. That the district meetings of the members of the Provincial, Medical, and Surgical Association, alluded to in their memorial, were very scantily attended; thirty-two persons only having attended the meeting at Bath, seventeen of whom were either Physicians or pure Surgeons. At the North Wales Branch, held at Wrexham, fourteen persons attended; whilst at Shrewsbury there attended but ten or eleven. The attendances at the other branches being of a similar character, as to composition and numbers, are yet held up in the Memorial as representing the opinions of the General Practitioners of England!!

3rd. The Memorial recently presented to the Right Honourable the Home Secretary by the Society of Apothecaries, very explicitly states the conditions upon which they would be prepared to surrender the examinations in medicine, &c., and these conditions are quite at variance with what is inferred in the Memorial of the Provincial Medical and Surgical Association.

4th. The unanimity of the Provincial Medical and Surgical Memorialists in opposing the establishment of a new College of General Practitioners, assuming this to be, as stated, the opinion of the district meetings (an assumption by no means well authenticated), cannot in the slightest degree invalidate the evidence afforded by the National Institute, that a new and independent College is the deliberate and most anxious desire of a vast majority of the General Practitioners in town and country; and the Council of the National Institute having obtained the medical statistics of various localities from whence Petitions have emanated, take the liberty of stating that, at Croydon for instance, where an influential member of the Provincial Medical and Surgical Association (Mr. Bottomley) resides, they discover that out of fourteen Medical Practitioners residing in that town, thirteen have subscribed their names to a Petition praying for a new College, one individual only dissenting, and that one being Mr. Bottomley himself.

5th. To the principles contained in the aforesaid Memorial of the Provincial Medical and Surgical Practitioners, and which are considered by the Memorialists as the only principles for legislation on Medical affairs which would be satisfactory to the Profession; namely, the principle of uniform and efficient qualification in every branch of Medical Science, with equal right for all persons so qualified to practise throughout Her Majesty's dominions, and the adoption of the representative principle in the formation of the governing Councils of the respective Colleges, so far as they apply to the great body of the Profession—the General Practitioners—the Council of the National Institute give their unqualified approval; they are points upon which the entire body of General Practitioners are quite agreed, and their opinions have been so expressed and most strenuously insisted upon by every party assuming to represent them by the Society of Apothecaries, by the Provincial Medical and Surgical Association, and more especially by a large preponderance of the General Practitioners of the Kingdom expressing their sentiments through the National Institute of Medicine, Surgery, and Midwifery. As the supporters, therefore, of a high and efficient standard of qualification for all persons exercising the onerous and important duties that daily devolve upon the Medical Profession, the General Practitioners are unanimous.

The National Institute, on the part of the General Practitioners, repudiate the assumption laid down by the Council of the College of Surgeons, that "the infallible consequence of raising unduly the standard of education, would be practically the evasion of any qualification, and the surrender of the poorer classes, under any surgical emergency, into the hands of the venders of drugs and other uneducated persons." The Council of the National Institute unhesitatingly affirm, that such an assertion is quite at variance with all experience; and that, if it should, unfortunately, so mislead Her Majesty's Government, as to induce it to legislate upon such a principle, it would prove the greatest impediment to the progress of science, and be highly detrimental to the public interests.

I have the honour to be, Sir,
Your most obedient Servant,
Nathaniel Clifton, Vice-President.

The National Institute of Medicine,
Surgery, and Midwifery, 4, Hanover-square, May 16, 1850.

REVIEWS.

Revelations of Egyptian Mysteries. With a Discourse on the Maintenance and Acquisition of Health. By Robert Howard, Practitioner of Medicine. London: Colburn. 1850. 8vo. Pp. 276.

We believe that in certain lunatic asylums some of the patients are encouraged to write works, which others, of a more mechanical turn, print for the general use of all who like to read them. We should take the work, of which an abbreviated title appears above to have escaped from some such place of confinement, but that the title-page bears the name of a well-known publisher, and the author affirms that he is a Medical Practitioner who has been many years established in London, and has, moreover, patients of his own. We are, therefore, bound to treat the book as coming within the sphere of our criticism, and we shall proceed to state what it contains, with the view of ascertaining what foundation there is for the author's belief, as expressed in the Introduction, that he has "arrived at conclusions of indubitable accuracy and of unspeakable importance to the world."

The work is divided into three parts, of which the first professes to treat of "the earth and its creatures." Here, after reviving the old comparison between the world and man's body, and stating incidentally that "no part of the earth which has not passed through the vegetable state" ought to be "ingested," our Author proceeds to inform us that "it was well understood in ancient times, that the land originally formed a continuous circle, whose border was extended at a prodigious height above its present surface, through the upper regions. . . . The operations of man in his interference with the mineral kingdom have had the effect of causing a formation of stone." (We shall presently see that the first of these petrifying "operations" was the eating of salt in Paradise.) Stone having been formed so impeded the escape of the "subterranean vapours" that they generated "explosive mixtures," by whose force the earth was "rent by large chasms, letting in the water;" and a second series of "ruptures" gave rise to the "stony mountains and their valleys." "During these vast convulsions there was, necessarily very great destruction in the vegetable and animal worlds, and swallowing up and devouring of the creatures of the earth, which may account for the great coal *deposites*." Caverns within the earth were thus originated, and more explosive mixtures, and continents and islands were formed by the repeated "violent rending of the surface of the earth," some of the land from the tropics being hurled, "with its inhabitants," to the frigid regions of the

north, and there "locked up in ice," and America, having been torn from Africa, and afterwards split into its northern and southern portions, of which the former twisted itself half round into its present position. Earthquakes still, from time to time, occur, and their frequency in cities is accounted for by the exertion made by the earth to "get rid of" the intolerable weight of the buildings. These matters having been thus dogmatically disposed of, Mr. Howard proceeds to compliment the priests of the ancient Egyptians on their wisdom in deifying the ibis, the crocodile, and the cat. He forgets the leeks and onions with which Juvenal taunted them.

"Porrum et cepe nefas violare, et frangere morsu,
O sanctas gentes, quibus hæc nascuntur in hortis
Numina!"

Perhaps our modern philosopher would excuse the worship of these vegetables on the same ground which he assigns for the reverence enjoined towards the sacred animals; namely, that otherwise the people might have eaten them; and onions, according to Mr. Howard, are very unwholesome. But his chief reason for eulogizing the Egyptian priests is, that they are said by Plutarch to have held salt in the greatest abhorrence, and to have taught that it is "destructively hurtful to man's nature." The following are some of our Author's own expressions regarding salt:—It is "a symbol of barrenness and desolation;" "foremost in the production of dire disease;" "most ferociously inimical to man's constitution;" "evidently the direct cause of consumption;" "nothing more likely to produce insanity;" "appears to be the abomination of desolation so mysteriously spoken of in Scripture;" "man could never have had recourse to flesh, had not his inclination first suffered perversion by the depravation of his appetite, which would result from the use of salt"—and an entire abstinence from it is "absolutely necessary in the cure of a great number of diseases." As an additional argument against its use, we have the following interpretation of the Mosaic account of the fall of man, introduced by the novel statement, that Moses was an Egyptian:

"The tree of life represents the vegetable kingdom; that is, the source and origin of animate life. The tree of the knowledge of good and evil represents the mineral kingdom, with which man was forbidden in any way to interfere. . . . In this allegory, the serpent, which did not come into existence until subsequently to man's fall, is represented as talking to Eve, and persuading her to eat of the forbidden fruit. If we inquire, why the serpent should be desirous that man should eat of the forbidden fruit, we immediately receive for answer, that the serpent owes his being to the fall of man; and that, unless man eat of the fruit, he comes not into existence. Thus, according to the fashion of ancient allegory, the serpent is the representation of a cause by a personification of its own effect, before the coming into operation of such cause. In like manner, it is not (?) declared that Eve was the author of transgression. Here, again, the effect is made to precede its own cause. Man, existing in unity, having transgressed or changed the ordinance, thereby rendered it necessary that he should henceforth live in duality. Thus, in accordance with the very clear evidence of Nature, it is declared, that man's fall, or disease and death, was occasioned by his departure from the vegetable kingdom, that is, the tree of life, and partaking of crude mineral substance, the source of death."—Pp. 63, 64.

On the following page, we read, that there is the greatest reason to believe, that the eating of salt constituted "the act of transgression alluded to by Moses;" and that "from the inculcations of the wise men of Egypt respecting salt, it may justly be concluded, that they were well aware of that circumstance." We do not think it worth while to comment on the jargon about effect preceding cause, and the serpent and Eve having performed their parts in the drama, in order that they might come into existence; neither shall we stop to inquire how Mr. Howard interprets the texts, "Salt is good," and "Ye are the salt of the earth." We recommend him to ride his hobby to an Arab tent, while we proceed to examine the Second Part of his book, which has the following title:—"History of the Creation; the Causes and the Progress of the Degeneration of Nature; and the manner of the Resurrection of the World, as allegorically represented by the Egyptian Philosophy."

Quid dignum tanto feret hic promissor hiatu?

First we have a "transient view" of the life of Hesiod. He and Homer are in another part of the Work, styled "divine messengers of truth;" and the Author declares that, if well understood, their compositions "would be found to be, in every respect, identical with sacred history." Leaving this blasphemous assertion to its deserved fate, and testifying our respect for Homer and Hesiod, by protesting against Mr. Howard's occasional attempts at translation, we will, as concisely as may be, set forth some of the "conclusions" arrived at in this portion of the work.

We are told, that the present world consists of the wreck of that which formerly existed. Saturn, with its fiery ring, is a world existing in the condition of immortality, or integral nature, where night does not exist, and age and death rule not. The circle of earth before alluded to, had once, like Saturn, its corresponding "Hyperion" circle of fire; but when the ruin of the earth, which had been commenced by man's eating salt, was accomplished by his further interference with the mineral kingdom for the purposes of art, the fiery circle collected in a body, and formed the sun, which still revolves in a circle. The moon, also resulting from the ruin of the Hyperion circle, must, like the sun, be composed of a kind of fire. That which is related in Plutarch, of the moon exerting an influence on the tides, is evidently spoken in jest. The ruined earth experienced a gradual loss of the living fire, which, passing invisibly through the air, on attaining its surface, collected in the luminous bodies which we call stars.

We have given these absurdities, as nearly as brevity will allow, in Mr. Howard's own words; and the only excuse for them must be sought for in the supposition that he has been dozing over a translation of Diodorus, and has mixed up the old Sicilian's worn out fancies with his own crude dreams, never having heard of Newton or Herschel.

We now return to the perfect earth, and are informed that an emanation passed from it into its atmosphere, by which its body became impregnated, and brought forth trees. Until death came into the world by man's eating salt there was no necessity for reproduction, and consequently fruits had originally no seeds in them. The fruits, however, no matter how or why, became decomposed, and as now in such cases, "the dissolution of the farinaceous and saccharine kinds brings myriads of living creatures into existence;" so we discover herein, says Mr. Howard, "the animal formative power, which, as we now see operating in the formation of small creatures, we must naturally suppose to have been the original producer of the human being." We may here observe, by the way, that judging Mr. Howard by his book, we have no doubt that his "primeval vegetable" parent was a monstrous medlar of (to borrow one of his own epithets) stupendous rottenness. Man having eaten salt, this marvellous process of hatching without eggs could not any longer operate, and so he received the power of "re-creating his own species." This is alluded to by Hesiod, as interpreted by Mr. Howard, when he states that Love was of subterranean origin, and that

"Nor man, nor god, his mighty force restrains,
Alike, in every breast, the godhead reigns."

We should have supposed this to mean the same thing as

"Love rules the court, the camp, the grove,
And men below, and saints above."

But listen to the oracle!

"The godhead signifies the substantial part of the head, or first creature, that is, the earth; and the ruling of the godhead in every breast means, that the bodies of all persons are polluted, and their disposition perverted, more or less, by the reception and entrance of matter, as food, or otherwise, direct from the earth, and without vegetable purification.....It is thus that love is of subterranean origin. Death, or the condition necessary for the existence of love, having thus been brought into the world by the use of subterranean matter."—P. 84.

that is, by the use of salt, as before explained.

We think there is some doubt in Mr. Howard's mind, whether the reproduction of the human species is rightly carried on. He says, indeed, that Hesiod's story of the earth having given birth to the ocean "without the mutual joys of love," means, "in a manner not originally in accordance with the Divine pleasure;" and he says (somewhat mysteriously) that the procreation of children "consists in a wonderful process of purification;" but we are inclined to think that he looks back with envious thoughts to the blissful period when men grew out of pumpkins, and lived, like chameleons, on the "ambrosial atmosphere." He would probably have sympathized with Sir Thomas Brown, who exclaims in his "Religio Medici," "I would be content that we might procreate like trees, without conjunction, or that there were any other way to perpetuate the world without this trivial and vulgar way." But enough of this.

We will not weary our readers by tracing the steps by which Mr. Howard arrives at his crowning blasphemy, that "the Saturnian terrestrial system, with its vegetable and animal kingdoms," constitutes the Trinity. The first few pages of the book justify a belief that the Author has lost his senses; a further perusal induces a doubt of his having ever possessed any; and when we come to his parody of the Athanasian Creed, we are tempted to exclaim with the poet—

"Ubi prava
Stultitia, hic est summa insania!"

This outrage upon religion and decency is followed by some mystical nonsense about the sacrifice of Prometheus and his punishment, and we are told how wonderful it is "to reflect that, down here, in the dark, cold, and damp pit into which the world has shrunk, we should live shut up in boxes, warmed by burning the remains of the former vegetable and animal creatures of the earth." Then follows more nonsense about the War of the Titans, representing "the conflagrant rising up of the earth," and the "War of Jove and Typhœus—now called the devil—another Egyptian allegory, illustrative of a similar conflagrant terrestrial restoration." The war between Michael and the dragon, we are told, clearly means the same thing. Shortly afterwards, it appears that Homer's Trojan war is the Typhœan war more circumstantially set forth. In fact, Mr. Howard's two ideas seem to be "salt" and the "restorative terrestrial conflagration," and we have seen nothing like his reasoning since we read an old book in two volumes, in which an elaborate attempt was made, with the aid of maps and diagrams, to prove that the plays of Shakespere were mysteries, each of them suggested by, and illustrating a separate portion of the surface of the moon, as seen through a telescope. Even the pyramids of Egypt are pressed into Mr. Howard's service; and he has discovered that the ancient Egyptians raised them "in order that they might, on the occasion of the next terrestrial conflagration, become ignited, and cause the fire to devour the stone of those regions, so that their country might by that means become

covered with fertile spots." We are given to understand, in different parts of the book, that the ancient Egyptians knew everything; and that these restorative conflagrations happen about once in seven thousand years, which at all events proves the disinterestedness of the architects of the pyramids. The vast cisterns and reservoirs which have puzzled travellers, were, as we now learn, constructed for the purpose of supplying "plenty of water," to the expected fire, since "the combustion of stone cannot go on, to any very great extent, without an abundant supply of water," for which reason, Nature has provided the glaciers to feed the flames when the "stony spires" of Switzerland shall be ignited by the "celestial fire."

The third part of the work contains "a discourse on the maintenance and acquisition of health on principles in accordance with the wisdom of the ancients." There are here occasional gleams of common sense, but they do not throw any new light on the subject. The author again anathematises salt, but he chaunts the praises of "unsophisticated wine" and "genuine beer," and all that we shall say of this part of his work is, that, considering what has preceded it, his patients may consider themselves fortunate if they are only required to eschew potatoes and salt, to drink vinegar, and to anoint their bodies with salad oil.

We have now arrived at the conclusion of this worthless production, which, but for the perverted quotations from Scripture, and other profane dealing with sacred subjects, would be simply ridiculous, and might not inaptly borrow its author's definition of Chaos,—"a volume of vaporous fluidity."

UNIVERSITY OF ST. ANDREWS.

MEDICAL EXAMINATION PAPER.

FIRST EXAMINATION.

Translate into English.—Medico vero est, cognita natura et causa morbi, judicare quid mutationis, requiratur, ut morbus in sanitatem mutetur. Hæc quidem est medicina rationalis sive dogmatica. Est et altera, empirica nimirum, quæ, missis hujusmodi ambagibus, sola remedia quærit et profert certa et definita vi prædita ad certos morbos delendos.

Hujusmodi remedia omnis circumforaneous medicus jactat, omnis anus se credit posse; populusque, qui fere decipi quam sapere mavult, talibus remediis semper fidit; neque profecto, postquam sanitatem cum re amiserit, facile sinit gratissimum menti errorem erripi; scilicet quem nolit intueri, adeo blanda est sperandi pro se cuique dulcedo. Quam pauca vero istiusmodi remedia adhuc reperta fuerint, peritissimi medici fatentur et dolent. Quod si remedia quædam fuerint quæ vi nondum explorata aut intellecta in corpore humano pollent, id minime mirum; quippe quia tot existant morbi quorum natura et causæ prorsus lateant. Cæterum, quo perfectior fuerit scientia medica, eo facilius erit medicamentorum virium, et modi quo corpus afficiant, varilsque in morbis prosint, rationem reddere.

1. What are the proximate and ultimate elements of limestone, sal ammoniac, and common alum?

2. What constitutes a neutral salt? What is the meaning of the term compound radical?

3. What are the principal ultimate elements of vegetable and animal substances? and in what do they mainly differ?

4. State the ordinary mode of preparing tartar emetic, muriate of morphia, prussic acid, and chloroform. How may the strength of dilute prussic acid be chemically ascertained?

5. Mention the most important purgatives, arranging them according to their different modes of action.

6. Name the different preparations of opium occurring in the Pharmacopœia, stating their various degrees of strength.

SECOND EXAMINATION.

1. Describe the chemical composition and the microscopical characters of human venous blood; mention the various conditions which accelerate or retard coagulation; explain how the buffy coat is formed; name the different forms of disease in which it is likely to occur; and state whether you regard its presence as a certain indication that venesection is necessary.

2. Explain the changes which respiration produces in the atmospheric air, and in the blood.

3. Describe the circulation within the cranium; mentioning any points in which you think it presents peculiarities, and naming the vessels which convey arterial blood to, and remove venous blood from the brain.

4. Describe the position, form, and structure of the stomach, and mention the changes which the food undergoes in it. Is there any anatomical reason why the act of vomiting is more easy in infant than in adult life? Mention the sources from which the stomach and intestines derive their nerves.

5. Give a brief description of the male urethra, in reference to its length, direction, structure, and relation to adjacent parts.

6. Describe the structure of the ovary. Explain the formation and appearance of the *Corpus luteum*, and state what inferences you draw from the presence of one or more of these bodies in the ovary.

THIRD EXAMINATION.

1. What are the ordinary symptoms of suppuration? Explain how pus is formed, and describe its general and microscopical characters.

2. Describe the symptoms and treatment of delirium tremens.

3. Describe the structural changes, symptoms, physical signs, and treatment of the different stages of pneumonia.

4. Mention the leading points of distinction between gout and rheumatism. Describe briefly how you would treat a gouty patient during the paroxysms and during the intervals, and prescribe (without any abbreviation) a draught containing colchicum, and a warm aperient draught suitable to the assumed case.

5. Point out the leading differences between rubeola and scarlatina, in reference to the latent period, the appearance and form of the eruption, the principal complications, and the sequelæ. Describe the general characters of the dropsy that frequently follows scarlatina, and state how it should be treated.

6. What treatment must be adopted in cases of poisoning by arsenic, corrosive sublimate, sugar of lead, oxalic acid, and opium?

7. Explain the pathology and treatment of phlegmasia dolens.

8. Specify the causes, symptoms, and treatment of retention of urine.

New South Wales.—A University is about to be established at Sydney, New South Wales, with Chairs for the Classical Languages, Mathematics, Chemistry, Natural History, Natural Philosophy, Mechanics, Physiology, and the Medical Sciences; Professorships of History, Philosophy, and Political Economy are to be added afterwards. 30,000*l.* have been voted for the building, and 5000*l.* for the fittings-up. The appointments of the Professors will range from 300*l.* to 400*l.* a-year, and they will have 100*l.* a-year for lodging, until their apartments are ready in the University. Professors going from Europe will have 100*l.* each for the expenses of the voyage.

Ophthalmic Statistics.—From an elaborate report of St. Mark's Ophthalmic Hospital, Dublin, by our esteemed friend Dr. W. R. Wilde, the Atlas of this excellent institution, it appears that 512 operations have been performed in the three years 1847—8, 1848—9, and 1849—50, viz.:—

		Males.	Fem.	Total.
Cataract	By extraction	32	23	55
	By solution, through cornea	47	29	76
	Do. through sclerotic	7	7	14
Formation of artificial pupil		29	18	47
Removal of staphyloma		5	6	11
Do. of pterygium		9	4	13
Strabismus	Right eye	23	15	38
	Left eye	6	6	12
	Both eyes	0	6	6
Entropium and trichiasis		27	35	62
Ectropium		7	7	14
Removal of tarsal tumours		37	20	57
Operations on lachrymal sac		10	40	50
Plepharo-plastic operations		5	1	6
Polypus of the ear		27	23	50
Removal of tonsil		0	1	1
Epicanthus		0	0	0
Total		271	241	512

Want of space prevents us going more at length into this excellent report, which contains the most accurate and extensive statistical tables on ophthalmic medicine we have yet seen; added to which report are some statistical tables on diseases of the ear, containing most valuable information for aurists and the Profession generally.

HEALTH OF LONDON DURING THE WEEK ENDING MAY 18.

In the week ending last Saturday, 880 deaths were registered in the metropolitan districts; a mortality which is still less than the average corrected for increase of population, but shows a disposition to increase on the low rate of mortality that has been observed during the previous three weeks. A gradual rise is apparent in recent returns; for, since the third week of April the numbers have been successively 803, 829, 857, and 880. Taking the ten corresponding weeks of the years 1840-9, it appears that last week's mortality was greater than in any corresponding week of 1840-6, but less than in any of 1847-9; and that the actual average of the ten weeks was 868, or raised in the ratio of population 947, compared with which latter number the present decrease amounts to 67. Of epidemics, small-pox and scarlatina were fatal respectively in 5 and 16 cases, and exhibit a low mortality; measles and hooping-cough, which carried off 21 and 36 children respectively, show nearly the average amount. Typhus is also less destructive than usual; it was fatal in 27 cases; but in the corresponding weeks of 10 years, it ranged from 18 to 79, the average being about 38.

The deaths in the several hospitals of London occurred as follow:—

GENERAL.			
St. George	2	Sussex & Brandenburgh-house (Fulham)	0
Westminster	6	Northumberland-house	1
Grey Coat Hospital	0	Whitmore House	0
Charing-cross	2	Pembroke House	0
Middlesex	4	St. Luke	0
University College	8	Miles'	0
Royal Free Hospital	0	Warburton's	0
King's College	2	Lunatic Asylum, Bow	2
St. Luke, City-road	0	Bethlem	0
St. Bartholomew	7	Lunatic Asylum, Brixton	1
London	3	Retreat, Clapham	0
Guy's	6	York House, Battersea	0
St. Thomas	2	New County, Wandsworth	2
Bethlem, London-road	0	Peckham House	0
FOR CONVICTS.		Camberwell House	0
Hospital Ship, Unité	0	LYING-IN.	
Penitentiary Hospital, Millbank	0	Queen Charlotte's	0
MILITARY AND NAVAL.		British	0
Royal Hospital, Chelsea (South)	0	City of London	1
Royal Hospital, Greenwich (East)	8	Hospital, York-road, Waterloo 2nd part	1
Royal Military Asylum	0	FOR PARTICULAR CLASSES.	
Coldstream Guards Hos.	1	Female Servant Invalid Asy., Stoke Newington	0
Grenadier Guards' Hospital	1	German Hospital	1
Scots Fusilier Guards	0	French Hospital	0
Royal Ordnance	2	Portuguese Jews' Hospital	0
Dreadnought Ship	0	German Jews' Hospital	0
LUNATIC.		FOR SPECIAL DISEASES.	
Kensington House	0	Small Pox	2
Munster-house (Fulham)	0	Fever Hospital	1
Normand-house (Fulham)	0	Lock	0
Otto-house (Fulham)	0	Consumption, Brompton	0
Blacklands-house	0	Opthalmic, Charing Cross	0

TOTAL, 65.

MORTALITY TABLE.

Deaths in the Week ending Saturday, May 18, 1850.
(Metropolis.)

CAUSES OF DEATH.	Total.	Average of Ten Weeks.
ALL CAUSES	880	868
SPECIFIED CAUSES	865	862
Zymotic (or Epidemic, Endemic, and Contagious) Diseases	147	165
SPORADIC DISEASES:		
Dropsy, Cancer and other Diseases of uncertain or variable seat	29	50
Tubercular Diseases	171	190
Diseases of the Brain, Spinal Marrow, Nerves, and Senses	109	111
Diseases of the Heart and Blood-vessels	35	25
Diseases of the Lungs, and of the other Organs of Respiration	145	113
Diseases of the Stomach, Liver, and other Organs of Digestion	61	57
Diseases of the Kidneys, &c.	8	8
Childbirth, Diseases of the Uterus, &c.	5	9
Rheumatism, Diseases of the Bones, Joints &c.	10	7
Diseases of the Skin, Cellular Tissue, &c.	4	1
Malformations	3	2
Premature Birth and Debility	28	21
Atrophy	14	12
Age	31	51
Sudden	28	9
Violence, Privation, Cold, and Intemperance	37	26
Causes not Specified	15	5

The following is the number of Deaths occurring from some of the more important special causes:—

Apoplexy.....	29	Heart	32	Phthisis 124	
Bronchitis ...	52	Hooping-cough	36	Pneumonia ...	63
Cholera.....	1	Hydrocephalus	24	Scarlatina	16
Childbirth.....	2	Influenza	2	Small-pox	5
Convulsions...	26	Liver	16	Stomach	4
Diarrhœa	11	Lungs	7	Teething	10
Dropsy	14	Measles	21	Typhus	27
Erysipelas ...	7	Paralysis	19	Uterus	3

BIRTHS AND DEATHS.

	Births.	Deaths.	Births over Deaths.
Males	780	464	316
Females	710	416	294
Total.....	1490	880	610

METEOROLOGY OF THE WEEK.

Electricity.*	Nothing was shown at any examination.	Positive, and tension weak at noon.	Nothing was shown throughout the day.	Negative, and active between 2 and 3 p.m.	Positive, and tension strong generally throughout the day.	N., with moderate tension at 9 a.m.; at other examinations P., and tension strong.	Positive, and tension strong at noon, and variable at other times.	
Rain in Inches.	0·01	0·02	0·11	0·02	0·00	0·05	0 01	SUM 0·22
Amount of Horizontal Movement of the Air.	Miles. 120	45	115	145	80	80	75	SUM 560
General Direction of Wind. P.M.	N.W.& N.	N.E. & E	W.	N.	N.	N.W.	S.W.	Var.
A.M.	S.W.	N.	Calm.	N.	N.	N.W.	W.N.W.	
Difference between the Mean Temperature of the day and the same day on an average of 7 years.	0·0	2·3 —	6·2 —	8·8 —	6·4 —	0·2 +	1·4 +	— 3·2
Ditto. Dew Point.	41·6	38·8	36·0	37·7	33·7	45·2	46·2	39·7
Mean of Thermometer. Dry.	52·6	50·3	46·4	43·7	46·0	53·2	53·2	49·2
Mean of Barometer.	29·879	29·963	29·851	29·783	29·806	29·773	29 647	29·817
Day.	Sunday	Monday	Tuesday.....	Wednesday.	Thursday ...	Friday	Saturday ...	Means ...

* In this Column, A. stands for Active; N. for Negative; and P. for Positive.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS.—The following gentlemen having undergone the necessary examinations for the diploma, were admitted members of the College at the meeting of the Court of Examiners on the 17th instant:—Messrs. George Hulme Beaman, King-street, Covent-garden; James Havey Lilley, Wisbeach, Cambridgeshire; George Down, Warwick-street, Pimlico; Edward Parry Beverley, Hackney; Edward Haycock, Bethnal-green; John Chamberlayne Barry, Draycot, Chippenham, Wiltshire; Thomas Nadsuld Brushfield, Union-street, Bishopsgate-street; John Davies Cleaton, Llanidloes, Montgomeryshire; Thomas Sarvis, Winchester-street, Bethnal-green; Henry Paul Leman, Sodbury, Glocestershire; James Joseph O'Donnell, Ballyshannon, county of Donegal; and Afred Becket, Thorne, Yorkshire.

APOTHECARIES' HALL.—Names of gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, 16th May, 1850:—Henry Lawrence, Bath; David Arthur, Neath, Glamorganshire; Christopher Atkinson Newnham, Farnham, Surrey; Frederick Bateman, London; Thomas James Duthoit, London; Pierre Eloy Bachelet, London; William Eddowis, Shrewsbury; Alfred Clark, Twickenham, Middlesex.

OBITUARY.—On the 6th inst., at Edinburgh, Dr. J. G. Buchanan. At Glasgow, on the 3rd instant, Mr. John Millar, Staff-Surgeon of the North British District. At Port Royal, Jamaica, George Brewster, M.D., R.N. At Kohat, lately, Dr. Healy, of the 1st Punjaub Cavalry, killed by the Afreedees. On the 20th, of ramollissement of the brain, G. Ireland Mills, Esq., aged 47, formerly Mr. Wakley's Deputy-Coroner. Drowned lately on Lake Erie, through the collision of two Canadian steam-boats, Surgeon Grantham, of the 23rd Regiment. Forty lives were lost on the occasion.

DEATH OF DR. HEALY.—Dr. Healy, of the 1st Punjaub cavalry, has lately been killed by the Afreedees, near Kohat. He was set upon by the hill-men, while travelling to join his regiment; his groom and grass-cutter killed by his side, and himself mortally wounded, so that he died immediately on reaching Kohat. The fatal wound is said to have been a gash in the skull eight inches long.

APPOINTMENT.—Dr. Lang has been elected Physician to the Exeter Dispensary, in the room of Dr. Tothill Massy, who has left the city.

NAVAL APPOINTMENTS.—Assist.-Surgeon Thos. Graham, M.D., from Her Majesty's ship Hastings, to the Honourable Company's steam-sloop Phlegethon, vice Sturtion, invalided.

MILITARY APPOINTMENTS.—7th Light Dragoons: Surgeon Augustus Henry Cowen, from the 60th Foot, to be Surgeon, vice Lawson, deceased.—60th Foot: Surgeon Thomas Alexander, from half-pay Rifle Brigade, to be Surgeon, vice Cowen, appointed to the 7th Light Dragoons.—91st Foot: Surgeon [illegible], from the 44th Foot, to be Surgeon, vice Forrest, promoted on the Staff.—Hospital Staff: Surgeon John Forrest, M.D., from 91st Foot, to be Staff-Surgeon of the 1st class, vice Millar, deceased.

UNIVERSITY COLLEGE, LONDON.—The Council at their session on Saturday last appointed Mr. George Viner Ellis to the Professorship of Anatomy, which had become vacant in consequence of the expiration of the period for which he had been appointed Junior Professor of Anatomy, and of the resignation by Professor Quain of the office of Senior Professor of Anatomy. Professor Quain will continue to be Special Professor of Clinical Surgery and Surgeon to the hospital. There is consequently a vacancy in the Junior Professorship of Anatomy.

UNIVERSITY COLLEGE HOSPITAL.—The Rev. Deacon Morrell has given the sum of 1000*l.* towards the relief of this charity from a debt of 3000*l.* The hospital is capable of containing 200 patients, but for want of means the number is limited to 120.

KING'S COLLEGE HOSPITAL.—The sum of 3500*l.* was subscribed in behalf of this Institution at the late festival. A much larger sum has since been collected.

ST. GEORGE'S SCHOOL OF MEDICINE, GROSVENOR-PLACE.—Distribution of Prizes.—Sir James Clark, Bart., F.R.S., in the chair, May 2, 1850. The Hon. Secretary, Dr. W. V. Pettigrew, read the Report, which showed the continued prosperity of the School, there being upwards of 100 pupils attending it. The Prizes were awarded as follows, appropriate remarks being made to each student by the Chairman, as the Prizes or Certificates were presented:—Senior, Anatomy: Gold medal, Mr. H. Bullock; silver ditto, Mr. F. Turner; certificate, Mr. W. Bloxham. Junior, Anatomy: Bronze medals, Mr. Benson, Mr. A. Umphelby: Certificates, Mr. H. Lawrence, Mr. Waters. Midwifery: Prize, Mr. H. Wilkin. Medicine: Prize, Mr. H. Bullock; Certificates, Mr. Brown, Mr. Dyer. Surgery: Prize, Mr. H. Bullock; Certificate, Mr. Brown. Chemistry: Prize, Mr. Waters; Certificate, Mr. Benson. Clinical Surgery: Prize, Mr. Bullock. Botany: Prize, Mr. A. Talbot; Certificates, Mr. H. Lane, Mr. Halford, and Mr. Fountain. Medical Jurisprudence: Prize, Mr. Brown; Certificate, Mr. A. Talbot. Practical Chemistry: Prize, Mr. Brown; Certificate, Mr. H. Lane, Mr. Baker, Mr. Fountain, Mr. H. Lawrence, and Mr. Bluck. Votes of thanks were given to the Chairman and Mr. Fergusson, for examining the Clinical Surgery Reports, and also to the Lecturers, proposed and seconded by the students. Throughout the proceedings the highest feelings were evinced, and evidently displayed, between the Lecturers and Students.

ROYAL ORTHOPÆDIC HOSPITAL.—On Wednesday the Anniversary Festival of this excellent Institution was held at the Freemasons' Tavern. There was a very large attendance of gentlemen on the occasion. The Orthopædic Hospital has given relief to more than 10,000 patients since its foundation; and out of this large number not one death has occurred from the mode of treatment pursued, nor has there been any instance of permanent suffering or injury. The average daily attendance of out-patients exceeds 100; the total number in regular attendance exceeds 700; and the new cases presented weekly are from 20 to 40. The treatment pursued not only embraces the cure of club feet, but all other contractions and deformities, especially lateral curvature of the spine. The list of subscriptions announced by the Secretary amounted to 1036*l.*, and included a contribution of 250 guineas from Her Majesty, on behalf of His Royal Highness the Prince of Wales. Mr. Quarles Harris, the benevolent founder of the Institution, was present on Wednesday night, and, in appropriate terms, announced to the company this distinguished mark of the Royal patronage.

WESTMINSTER MEDICAL SOCIETY.—At a Special Meeting of this Society, held May 18, the following gentlemen were elected as Officers of the amalgamated Medical Societies for the ensuing year:—Vice-Presidents: J. F. Clarke, Esq.; A. B. Garrod, M.D. Councillors: E. W. Murphy, M.D.; F. Sibson, M.D., F.R.S.; S. W. J. Merriman, M.D.; W. Tyler Smith, M.D.; R. Greenhalgh, Esq.; B. Travers, Esq., jun.; J. R. Cormack, M.D.; E. Lankester, M.D., F.R.S.; E. Canton, Esq.; W. Harvey, Esq. Secretary: C. H. F. Routh, M.D.

MUNIFICENT BEQUESTS.—Captain John Cheape, of Girgenti, Ayrshire, has left nearly the whole of his property to be divided between the Infirmaries of Edinburgh, Glasgow, Aberdeen, Dumfries, and Inverness. It is expected that each of these Institutions will receive about 2000*l.* We trust Captain Cheape had not any poor relatives.

QUEEN'S COLLEGE, BIRMINGHAM.—The Rev. Dr. Warneford has presented this Institution with 1000*l.* for the endowment of the wardenship. The Rev. Doctor has, on previous occasions, made large donations on behalf of the College.

The Rev. J. R. Rhodes has presented 200 guineas to the Leeds Infirmary.

Nearly 2000*l.* were collected, lately, at a dinner, in behalf of St. Mary's Hospital, Paddington.

THE medicines and medical stores for the Aretic expedition have cost 550*l.*

CHOLERA has broken out with virulence in the European artillery barracks at Bombay, and also in several steam-boats on the Mississippi. It is yielding in the Havanna, and more amenable to medical treatment.

YELLOW FEVER.—The average number of deaths from yellow fever at Rio de Janeiro exceeds 200 daily. The alarm is intense among all classes of society. Several English and foreign houses are closed for business, in consequence of their entire establishments being attacked. The shipping in port had suffered to a fearful degree; several vessels were without masters or crew; and, consequently, many vessels ready for sea are unable to proceed. In one of the city districts 118 persons died in one day, and scarcely a house is free from sickness. The English, it is said, have not suffered much; but the mortality has been great among the French, Germans, and Italians, and new comers have scarcely a chance of escape; many members of the Legislature have fallen victims. The mortality among the blacks has been very great. The medical men at Rio de Janeiro speak of it as the ordinary African remittent fever, and deny that it is the yellow fever of the West Indies. The disease has also broken out at Rio Grande, and proved very fatal. The disease has also spread to the port of Para, where it is raging with great violence, many foreigners and natives having died of it. Mr. R. Ryan, the British Consul, died on the 2nd instant. Much alarm prevails in consequence of its fatality. There can be but little doubt that it will spread over the whole extent of the South American coast.

TO CORRESPONDENTS.

Our limits alone prevent the insertion of many valuable articles, among which we may mention Professor Owen's Lectures; Dr. Parkes' Lectures on Clinical Medicine; Mr. Walton's Lectures on Ophthalmic Surgery; Dr. Jenner's Paper on Typhus and Typhoid Fever, &c.; Dr. Lightfoot on Puerperal Fever; Dr. Sheridan Muspratt on the Influence of Chemistry on the Animal, Vegetable, and Mineral Kingdoms; Dr. Ojier Ward, on Perforating Ulcer of the Stomach; Correspondence, &c. &c. We can hardly, at present, keep pace with the kindness of our friends.

ORIGINAL LECTURES.

LECTURES
ON
CLINICAL MEDICINE.
DELIVERED AT UNIVERSITY COLLEGE HOSPITAL.

By E. A. PARKES, M.D., Lond.:

Member of the Royal College of Physicians, Professor of Clinical Medicine in University College, and Physician to the Hospital.

LECTURE VIII.

Diagnosis of Typhoid Fever—Chemical and Physical Characters of the Stools considered as aids to Diagnosis.

GENTLEMEN,—We considered at our last lecture the symptoms of a case of typhoid fever, which presented in a very marked manner the characteristics of a moderately severe case, terminating favourably. Let me sum up its main features. There occurred in this patient, a boy, aged 17, sudden, severe headache, pain in the limbs, and diarrhœa, without marked rigors. Then anorexia and general muscular weakness ensued, which sent him to his bed on the 4th day. There was delirium on the sixth night, and a single attack of copious epistaxis on the 10th day. When admitted on the 10th day, there were numerous rose spots on the skin; and there was diarrhœa, with alkaline stools, bronchitis and congestion of the lungs, without expectoration, prostration, a furred brown tongue, quick pulse, and hot skin. The headache disappeared on the 12th day, the delirium on the 14th, the deafness not till the 23rd. Fresh crops of rose spots came out till the 16th or 17th day. Numerous sudamina, with acid contents, appeared on a dry skin on the 13th day, and continued to appear till the 25th. Diarrhœa, with alkaline stools, continued till the 18th or 19th day, when the stools became more consistent and strongly acid. The urine was acid throughout the illness, except on the 15th and 16th days, when it became neutral and alkaline. Decided improvement in the general symptoms and in the chest physical signs, began on the 15th day. On the same day, a soft systolic murmur was heard in the thoracic aorta, the carotids, and the femorals, not over the heart. Convalescence was rapidly established after the 16th day.

To-day I desire to confine myself almost entirely to the diagnosis of typhoid fever, and shall digress only to allude to one or two points we could not before discuss.

A disease presenting, in every case which is observed, a certain uniformity in its features, a certain succession and mode of occurrence in its principal symptoms, and a constant similitude in its *post-mortem* characters, and which, from these and other circumstances, can be proved to arise from a special and peculiar cause, represents one of those species which Sydenham declared ought to be distinguished with as much care from each other as the different genera of animals and plants are distinguished by zoologists and botanists. I shall not occupy your time now with an enumeration of the reasons which have led me to adopt the opinion, that typhoid fever is a distinct species, having a certain course, presenting regular symptoms, and proceeding from a specific cause. Suffice it to say, that I believe the proof of its specialty and individuality to be as complete as anything in the whole history of medicine. The distinction between typhoid fever and all other specific diseases, and especially that with which it has so long been confounded, viz., exanthematic typhus, is, I believe, drawn with greater definiteness and certainty than in the case of any other two diseases.(a)

It is not my wish to present to you at present any inferences which may be drawn from the general history of typhoid fever, as to the mode in which its specific cause unfolds itself, so to speak, in the organism. It appears probable that the typhoid poison operates first as a toxic agent, impressing a pernicious effect on the whole economy, and then displaying itself in certain special localities, on which its secondary influences appear chiefly to fall. It affects, in this secondary manner, chiefly the mucous membranes and the skin, and principally the former. Its influence upon the mucous membranes, or upon some of their component structures, is indeed remarkable. Thus the membranes of the throat, the small intestines, the nose, and the lungs, often afford unequivocal signs of disease, even in the first few days, from the symptoms of angina, epistaxis, bronchitis, and diarrhœa, and in later periods these membranes are often profoundly diseased. The mucous membranes of the lachrymal passages, and even the conjunctivæ, are frequently affected, and at a somewhat later date the tympanic membrane suffers. The urinary and genital mucous membranes, and the membrane of the gall-bladder, are less commonly attacked, but yet occasionally show unequivocal signs, after death, of a participation in the general disease. The degree and manner in which any particular mucous membrane becomes affected need not be adverted to; it may only be remarked, that the affection of a peculiar structure in the small intestines, viz., the patches of Peyer, or rather of the tissue below them, takes place so early and so constantly as to be accepted as the principal anatomical sign of the disease.

The implication of the skin as an organ in which secondary manifestations occur, is evidenced, first by the rose spots appearing from the 6th to the 10th day usually, secondly by the sudamina appearing after the 12th day, and thirdly, but only occasionally, by a general slight duskiness or earthy tint of the surface.

The bearing which these [illegible] symptoms have upon the diagnosis [illegible] may be expressed in the following proposition, viz., that the *diagnosis* of typhoid fever *is to be made from the symptoms derived from the implication of the mucous membranes and the skin, plus the general febrile symptoms, which may exist in various other affections.* The general febrile state, whatever may be its type, mild or severe, does not appear to have any absolutely pathognomonic characters which are available as immediate aids to diagnosis. Various other affections proceeding from specific or non-specific causes may present a general state not easily distinguishable from the febrile state of this fever, unless, indeed, the succession of phenomena has been carefully observed for some days. Consequently, in the cases referred to, in which the febrile state assumes what has been commonly called a "typhoid character," if it were attempted to draw the diagnosis from the general symptoms alone, without reference to the signs which are to be derived from the local manifestations of the poison, frequent mistakes would inevitably be made.

Of the general febrile symptoms, the most important for diagnosis are the severe but evanescent headache, the delirium, the muscular pains and weakness, the anorexia, thirst, hot skin, and quickened pulse, and, at a later date, the somnolency, or the coma-vigil, the spasmodic movements and contractions.

Of the symptoms derived from the skin, by far the most important for diagnosis is the eruption of rose lenticular spots, the characters of which we discussed at the last Lecture. The sudamina are occasionally very useful, and the central flushing of the face, and the slight general duskiness of the skin, may also occasionally aid us.

Among the symptoms derived from the mucous membranes, the most important, as far as diagnosis simply is concerned, are the epistaxis, the diarrhœa, the abdominal pain and meteorism, the signs of bronchitis, the deafness, and the tinnitus aurium. The import and characters of these symptoms we have already considered, with the exception of the diarrhœa. As we could not conveniently take up this point before, permit me now to digress from the subject of diagnosis for a few moments.

Violent diarrhœa occurs sometimes as an initiatory symptom, and after lasting for two or three days may almost disappear, to return in the second week. Sometimes, however, this violent diarrhœa continues throughout the illness. More usually, perhaps, there is moderate looseness of the bowels from the outset; even if the stools are not more numerous than one or two per diem, they are thin, and contain little fæculent matter; or, if one stool contains fæculent matter, the next, passed a few hours subsequently, is quite thin. Yet diarrhœa is not absolutely constant. Cases are on record, (one has been particularly noticed by Dr. Jenner,) in which, with extensive ulceration of Peyer's patches, the bowels had been confined to so great a degree as to necessitate the administration of laxatives. Such cases being regarded as infrequent and exceptional, we may state, that diarrhœa is almost always to be looked for in typhoid fever.

With respect to the immediate source of the intestinal discharge, this probably varies at different periods of the fever. When it occurs on the first or second day, it would seem hardly possible to refer it to any special lesion of Peyer's patches, but rather to an affection of the general mucous membrane. At a later date, when the typhoid matter has been deposited, and is breaking down, it would seem, *à priori*, fair to refer the diarrhœa, in part at least, to such local changes; and this view is supported by the fact, that (with certain remarkable exceptions) the severity of the diarrhœa and the extent of disease of Peyer's patches bear some kind of relation to each other. Yet, even at this period the discharge might very possibly be in part derived from the general membrane, beneath which no foreign material has been deposited. At a still later date, the ulcers of the small or large intestines, which remain after the separation of the typhoid matter, or which arise in the height of the fever, from some ulcerative diathesis, may keep up or augment diarrhœa, as in the case of a woman whom we lately admitted, at the latter end of an attack of typhoid fever, and in whom diarrhœa lasted long after the true fever had ceased, no doubt from unhealed and possibly spreading intestinal ulceration. In making an inquiry into the nature of the discharges in typhoid fever, you will therefore see, that if certain results are to be aimed at, there is an absolute necessity for examining cases at different periods, since several morbid processes are going on, and may produce very different effects. Let us now put this question, "Are there any physical or chemical characters by which a typhoid stool can be so certainly recognized as to enable us to affix to it a diagnostic value?" Before attempting to answer this question, I must premise that I am unable to give any information which can be considered perfectly satisfactory. The discharges in typhoid fever have not yet been properly investigated by chemists, and even those in a state of health have not been fully examined, so that a standard of comparison is wanting. Moreover, by no one, so far as I know, have the stools been examined in each stage of the disease as they ought to be. Again, the difficulties in the examination of intestinal discharges are unusually great, inasmuch as there is great risk of admixture with foreign matters, food, medicine, or urine, so that we are hardly ever certain that we have obtained the discharge from the membrane in a state of purity. Even when we have obtained it as pure as possible, it is, so to speak, a very composite excretion. Various structures have aided its formation, and have added to it special ingredients, which chemistry separates but imperfectly and with difficulty.

In laying before you such information as I have been able to collect, I wish you to understand what it is worth. It is necessarily imperfect, and can only be considered as the commencement of more accurate inquiries. I should not bring it to your notice, if I could find anything more definite and complete in the published writings which are known to me. You will find in various writings, those of Bright, Louis, Chomel, Seitz, Bartlett, Jenner, and others, very accurate descriptions of the physical characters of the stools, and those I am about to relate to you have been already noticed by these authors.

The cases from which I shall derive my description were ten in number; either patients in this or in the Fever Hospital; they were all on strict diet, were taking little medicine, (those in this hospital took none for a day or two before the stool was taken,) and were all well-marked cases of the disease. In none had hæmorrhage occurred from the bowels. In one case there was a little urine mixed with the stool, which was only detected by finding a

(a) It is impossible to allude to this subject without making a passing reference to those admirable researches carried on by one of our own Professors, Dr. Jenner, which have, as far as can be seen, absolutely settled this important question of the identity or non-identity of typhus and typhoid fevers.

small quantity of urea; in all the others the stool appeared free from any foreign admixture.

The stools were loose and thin, and varied in colour from a pale yellow to a very deep orange. On standing, in 7 out of 10 cases, two strata formed; the lower stratum was made up of an uncertain quantity of browniah or yellow granular substance, and of a whiter, flocculent, or curdy matter; above this was a thinnish fawn or orange coloured fluid. When this separation occurred, the examination was thus conducted:—The thin fluid was drawn off, filtered through coarse paper, and analyzed; the granular layer was then examined with the microscope, but no chemical analysis was made of it. When no separation occurred, the stool was analyzed as a whole.

The *supernatant fluid* presented the following characters:—The smell was scarcely fæculent; it was very peculiar, sometimes very offensive, sometimes ammoniacal. The re-action in all cases was strongly alkaline from fixed alkali, as well as in some cases from carbonate of ammonia. (a) Its average specific gravity in 6 cases was 1015·8; the highest, 1023·11; the lowest, 1010·8. The solids in 1000 parts in 7 cases varied from 72 to 24 parts, the average being 38·46. As noticed by Simon, the fluid always contained albumen, that is, an organic matter coagulable by heat and nitric acid. This was only perfectly estimated in 3 examinations; its average was only 1 part in 1000. The rest of the organic matter consisted of fat, biliary matter, and various quantities of substances soluble in water or spirit, such as may be obtained from healthy stools. There was a variable, but, except in one case, a considerable, amount of soluble salts, averaging, in 7 cases, 9·64 per 1000,(b) and a very variable amount of phosphate of lime, amounting, on an average, to 2·8 per 1000.

In regard more particularly to the biliary matter, it generally gave a dark red, purple, or mahogany tint with nitric acid; in one case only, a green tint. Sulphuric acid generally gave a port-wine tint, which did not appear to be increased by the addition of sugar. Liq. potassæ boiled with the fluid destroyed the colour. The supernatant fluid appears, then, to be a mixture of soluble salts, a small quantity of albumen, with biliary and indeterminate organic matter, and a small proportion of phosphate of lime.

The analysis of a solid stool from a typhoid patient gave very different results. It was impossible to say that it was in any way abnormal. In 1000 parts there were 92·84 organic matters, only 3·36 of soluble salts, and 24·28 of insoluble phosphates. A healthy stool I was analyzing at the same time gave 24·91 of phosphate of lime and magnesia in 1000 parts. The solid portion of the typhoid stool was surrounded by a red fluid, like the supernatant fluid of a more characteristic stool.

The *granular layer*, formed by the separation into strata, examined under the microscope, showed various irregular cell-forms and darkish yellow masses; granular cells, some epithelium, (generally imperfect,) fat and granular matter. In one case there were pus-cells, in another round bodies, with depressed centres and double outlines. Crystals of triple phosphate were observed in five cases out of eight, and in another case, formed after two or three days' standing. Various foreign matters, such as spiral vessels, vegetable cells, starch globules, &c., were generally observed in the sediment. The white, or curdy matters, were amorphous.

The only analyses of the stools in typhoid fever known to me, besides those referred to in Simon, are 3 recorded in Seitz's work, (c) and made by Dr. Marklein. In these cases the stools were alkaline, the solids were 19, 32, and 16 per 1000, and the salts soluble and insoluble, 9, 13, and 10 respectively.

Are these characters sufficiently marked to be of diagnostic value? It may be doubted whether this can be answered in the affirmative. All that can be said at present is, that in perhaps 15 or 16 cases, the stools of typhoid fever have been always alkaline, and when liquid have contained soluble salts in some quantity, and a small portion of albumen. But 15 cases are not enough to prove that the stools always possess these characters in typhoid fever, and, at present, we are not in a position to say that such characters may not appear in the evacuations of other diseases. In exanthematic typhus fever, I think the rule is, that the stools are acid, and they are generally tolerably solid. Yet I have seen, in two cases, liquid stools in typhus, which were strongly alkaline, perhaps from ammonia, but this was not determined; and in one of these cases there were over 9 parts per 1000 of soluble salts. Generally in typhus, however, the stools are more consistent, are poor in soluble and rich in insoluble salts, herein resembling healthy evacuations. In the diarrhœa attending some kinds of slight enteritis, the stools are sometimes alkaline; but in physical appearance are different from the typhoid stools, and probably differ chemically or microscopically, although I am not aware that they have ever been properly examined. In some other cases, of various diseases, I have seen loose stools alkaline from ammonia, which closely resembled in physical appearances the typhoid evacuations.

The existence of crystals of the ammoniaco-magnesian phosphate in typhoid stools is worth nothing as a diagnostic mark. I have found them as often in the stools of exanthematic typhus, and sometimes in other cases.

Perhaps we may state, that when the typhoid stool puts on its most marked character it may assist the diagnosis; and when, in a doubtful case, the stools present very different characters, it may be determined by their aid that the case is not one of typhoid fever.

Returning from this digression, the following rules may be laid down regarding the diagnosis of typhoid fever from the diseases of this country:—

There are two classes of disease with which typhoid fever may be confounded, viz., those which resemble it in respect of its general febrile symptoms, and those which resemble it in respect of some special symptom,—such as the diarrhœa, or, in some cases, the head symptoms. So, also, there are two periods in which the mistake is most likely to be made between the first and second of these classes respectively, viz., before the first 6 days, and after the 10th or 12th.

The diseases, seen in this country, which resemble typhoid fever, in presenting at an early period febrile symptoms of a somewhat similar kind, are typhus; small-pox, measles, and scarlatina, (when the eruptions are obscure;) acute tuberculosis, (especially in children;) pyohæmia; erysipelas; latent pneumonia, or other latent inflammations; and occasionally acute glanders. The diseases which resemble it, by presenting one or more of the symptoms resulting from the toxic localization, are gastro-enteritis, and entero-colitis. Meningitis, and central cerebral softening, also sometimes resemble it, and occasionally delirium tremens.

The following rules may perhaps be found useful in diagnosis:—

1. The diagnosis of typhoid fever is absolute, when, on a febrile disease attended with looseness of the bowels, unequivocal rose spots appear on the sixth or eighth day.

2. If there are no rose spots, or if these are indistinct, the diagnosis is still nearly certain, if in a febrile disease, mild or severe, which has lasted eight or ten days, there is, or has been, epistaxis,—if there is diarrhœa with alkaline stools, abdominal pains, bronchitic rhonchi, with considerable muscular weakness, delirium, &c., provided that the *positive* symptoms of the diseases above enumerated are absent. If sudamina appear on and after the twelfth day, the diagnosis is strengthened. Hæmorrhage from the bowels, in such a case, would almost make the diagnosis absolute, without reference to other affections.

3. If in a disease presenting febrile symptoms similar to those seen in typhoid fever, it is impossible to obtain any of the signs usually furnished by the skin and mucous membranes,—viz., rose-spots, diarrhœa, abdominal tenderness, epistaxis, bronchitic rhonchi, &c.,—the diagnosis of typhoid fever should never be given until inquiry has been made into the possibility of the case being one of those above enumerated. If, in such a case, the diagnosis of typhoid fever be ultimately given, this can be done only on the principle of exclusion, viz., by finding that the symptoms do not accord with the supposition that the disease is typhus, pyohæmia, latent pneumonia, (*i. e.*, pneumonia unmarked by the usual symptoms of cough and expectoration,) acute tuberculosis, acute glanders, &c. Now, in many of these diseases, we have special symptoms which are easily recognized; as in typhus, the mulberry rash, the dusky skin, the extreme stupor, &c.; in pyohæmia, the yellowish earthy tint of the surface, or the absolute jaundice, the severe shiverings, the intense headache, torpor, and delirium, which, to a practised eye, is, I think, different from the delirium of either typhoid or typhus fever; in variola, malignant erysipelas, and in the gangrenous erysipelas from putrid infection, we have, in the vast majority of cases, diagnostic eruptions, or symptoms derived from the skin and subcutaneous cellular tissue, &c. In acute glanders, there is often the tuberiform cutaneous eruption, and the affection of the nasal mucous membrane; in pneumonia, we discover the physical signs, unless the pneumonia be lobular and much scattered, when physical signs often fail; this case, however, is most commonly connected with pyohæmia. All these diseases are usually easily excluded; a very little care will enable us to be certain that they do not constitute the disease before us, and in many cases, even if one of them, such as pyohæmia or erysipelas, supervenes on typhoid fever, the fact of there being two diseases present can be made out if the case has been watched.

It is, unfortunately, different with some other affections, especially acute tuberculosis, meningitis, (tuberculous, purulent, or simple,) cerebral softening of some kind, and, occasionally, delirium tremens. Any of these diseases may produce symptoms which closely simulate an ataxic form of typhoid fever. You will understand that, in many cases, the distinction of typhoid fever and these affections can be made easily by aid of the symptoms derived from the secondary effects on the skin or mucous membranes in typhoid fever, but we are speaking now of cases in which these utterly fail, in which we have decided that the case is not one of typhus, pyohæmia, variola, latent inflammation, &c., and, consequently, in which we have reduced the problem to the determination of whether the case is ataxic typhoid fever, *or* acute tuberculosis, meningitis, delirium tremens, central cerebral softening, &c. I believe that error cannot always be avoided with the utmost care. Acute tuberculosis is most likely to be mistaken when it occurs in children. Often, however, there is a long initiatory period, the abdomen is comparatively unaffected, that is to say, there is little pain or diarrhœa, but there may be more sickness than in typhoid; the head symptoms have a different aspect, *i. e.*, the headache and delirium do not occur in their regular order, but observe unusual alternations, and altogether the case does not exactly square with the symptoms of typhoid fever. The chest symptoms may be prominent, and afford a clue to the real nature of the case, although often all physical signs except those indicating a general bronchitis fail. Attention should also be directed to the absence of the positive sign of typhoid fever, viz., the rose-spots. In tuberculous meningitis we may have signs, from the presence of tubercle in the lungs or elsewhere, and sometimes assistance may be derived from considering, if it can be learned, the time when the headache and delirium came on, the contraction of the pupil, the degree of intolerance of light, which is greater in meningitis than in typhoid fever; the vomiting, which is more marked in meningitis; the state of the tongue, which is cleaner in meningitis; the comparative mildness of the pyrexia, *i. e.*, of the heat of the skin, quick pulse, &c., in this latter disease. In delirium tremens we are often guided by the kind of delirium, the history of the case, &c., and there is not so much difficulty here as in meningitis. Central cerebral softening is characterised by the predominance, very early in the disease, of the cerebral symptoms over the general febrile

(a) The ammoniacal re-action can be ascertained, as in the case of the urine, by drying the test-paper and placing it in a warm place. The alkaline re-action from ammonia disappears.

(b) In the exceptional case referred to, which is included among the seven, there were only 3·97 per 1000 of sol. salts.

(c) "Der Typhus, von Dr. Franz Seitz." Erlangen. 1847. P. 684.

condition, whereas in typhoid fever, although there may be intense headache and delirium in the first week, these do not assume for the most part so predominant a character as in central softening. There may be in both affections spasms and contractions, but these would, in such a case, be more in favour of softening than typhoid fever; paralysis would, of course, indicate softening, yet in the absence of any signs drawn from the abdomen and the skin, the diagnosis between these affections is not always possible. For an able discussion on an obscure case of typhoid fever, I may refer you to one of Dr. Walshe's published Lectures.

The diseases which resemble typhoid fever by simulating, as it were, one or two of its symptoms, are some forms of entero-colitis, or mild colitis, either primary, or in children, as secondary to the exanthemata. In the primary cases, however, the local symptoms are in adults, usually quite disproportionate to the general febrile state; there is often very little heat of skin, or rapidity of pulse, hardly any shivering, no headache, delirium, tinnitus, or confusion of mind; no chest symptoms, comparatively little debility, but simply persistent diarrhœa, with tender, and, perhaps, tumid abdomen. The stools, also, are often slimy, with gelatinous-looking flakes, mixed with a more or less brownish or greenish fluid, and portions of fæculent matter; but there is not the yellow or dark red fluid, and granular curdy substratum of the typhoid stool. The difficulty, however, as regards this point, is experienced not in adults, in whom entero-colitis is comparatively uncommon, and is a mild affection, but in children. In children from two to six years of age, typhoid fever is not uncommon, and various not very well understood forms of entero-colitis are also frequent. In this latter case, the febrile symptoms often run higher than in adults, and assume the so-called "typhoid" character. There is headache, delirium, wakefulness, during the first days, and subsequently stupor. But the skin is seldom so hot as in typhoid fever, as has been proved by the careful observations of M. Roger, nor is the prostration usually so extreme. If rose spots or sudamina appear in a doubtful case of this kind, the diagnosis of typhoid may at once be given, but if they do not, then the distinction cannot be made out till the disease has been watched for five or six days, and the development and mode of succession of the symptoms determined. Even after such careful watching, the diagnosis in children is not always possible. As an example of this I may refer you to Rilliet and Barthez's excellent treatise, where you will find (a) two cases of entero-colitis, collated with two cases of typhoid fever in children, and the striking uniformity of the symptoms in each case demonstrated. The best, and indeed only certain diagnostic mark in such cases is, the unequivocal appearance of the rose-spots; and when these cannot be found, the diagnosis should not, in children, be considered absolute. In the secondary cases, viz., in those consequent on the exanthemata, the history of the disease, and the existing state of the skin, will determine the point.

There is one symptom which has been much insisted upon as a diagnostic mark, which I have not hitherto mentioned, viz., enlargement of the spleen as detected by percussion. But the spleen, in cases of typhoid fever, is often not enlarged to an extent appreciable by percussion; or, if it be enlarged, this is not always easily determined. Besides, we know at present so little about the evanescent enlargements of the spleen, that I can hardly conceive this sign, even if present, would afford any great addition to the certainty of the diagnosis.

Finally, in fixing the diagnosis of typhoid fever in adults, it should never be forgotten that it is most common under the age of forty; comparatively seldom seen above forty, and very rarely indeed over fifty. In old people there are many febrile conditions consequent on latent and subacute inflammations, or on some derangement of the urinary secretion, &c., which may bear at first sight some resemblance to typhoid fever; but the age of the patient will be at once an argument, and almost a certain one, against the existence of this disease.

(a) Traité Clinique et Pratique des Maladies des Enfans. Par MM. Rilliet et Barthez. Tome II. Pp. 383. Paris, 1843.

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DELIVERED AT THE ROYAL COLLEGE OF PHYSICIANS.

By R. B. TODD, M.D., F.R.S.

ON THE PATHOLOGY AND TREATMENT OF DELIRIUM AND COMA.

LECTURE III.

(Concluded from page 381.)

Let me now inquire whether any of the other forms of delirium which I have described will admit of a similar or analogous explanation to that which I have given of delirium tremens.

That form of delirium, which most closely resembles it, is the renal epileptic; and this affords very striking points of analogy with delirium tremens as to the circumstances which accompany its development.

Thus, the blood is the seat of a long course of chronic poisoning due to the defective action of the kidneys and the insidious chronic disease of those organs,—due, also, perhaps, to the ingestion of deleterious materials, for the subjects of this disease are frequently addicted to intemperate habits both in eating and drinking.

There is a prevailing opinion that the blood is poisoned in cases of this description by the accumulation in it of urea which the kidneys are unable to eliminate. The foundation of this view was the celebrated experiment of Dumas and Prevost, which consisted in the extirpation of the kidneys from a dog, which afterwards died with symptoms referrible to disturbance of the cerebral functions, and urea was discovered in large quantities in the blood. A similar result followed a repetition of the experiment upon dogs, cats, and rabbits, by Mayer, and also by Vauquelin and Segalas; and in every case urea was found in abundance in the blood. Now there can be no doubt that, in a large number of the cases of chronic disease of the kidney, urea is prone to accumulate in the blood; and it is highly reasonable to suppose that when it reaches a certain point in quantity, or when the blood assumes a certain degree of poverty favourable to the exosmose of its poisoned serum among the elements of the tissues, then the signs of poisoning appear—in the delirium or in the coma.

Very recently, my friend, Dr. Owen Rees, whose opinions are entitled to the utmost respect, has cast some doubt upon this view of the poisonous effects of urea, by the narration of a case in which there were no symptoms of poisoning, but the poison was present: a larger quantity of urea was detected in the blood than he had ever found before in a case of Bright's disease. But Dr. Rees throws out a suggestion, that probably a certain tenuity of the blood is necessary to ensure the poisoning influence of the urea. In this view I fully concur, and believe that the particular exception to which Dr. Rees referred was caused by the state of the blood; for all analogy shows that a poisoning influence will take place more rapidly with a thin blood than with one of normal density. Dr. Christison, indeed, had already referred to cases in which the urea was present in the blood without any poisonous effects. But these were exceptional cases; and there is no reason to deny that the tolerance of the poison might have been due to a peculiarity in the blood itself.

In the recent epidemic of cholera we had too many proofs of the connexion between imperfect excretion by the kidney and delirious and comatose affections. How many were the cases of individuals who, having weathered the dreadful storm of the early and more violent symptoms, afterwards passed through delirium and coma to death; poisoned in some cases in a manner strikingly similar to that by opium, and always connected with the defective action of the kidneys! And how rapidly, and even suddenly, in many instances, were the symptoms removed by a free discharge of urine! In these cases I apprehend there can be no doubt that the poison was urea.

The view, then, that urea accumulating in the blood may poison the brain as alcohol and as opium does, appears to me to be a highly reasonable one.

The characters of the blood in cases of chronic renal disease have been well studied, and these are identical with those which we infer to belong to the blood of patients labouring under delirium tremens. They are, an increased proportion of water—a diminution of albumen—a diminution, in a very marked manner, of the red particles. This condition of blood is very favourable to serous transudations through the parietes of the vessels, and very unfavourable to the removal of effete matters from the tissues. The exosmose from the blood-vessels would doubtless be immensely in excess of the endosmose unto them.

Thus we have, in this form of delirium, a chronic gradual perversion of nutrition,—the development of a poison in the blood,—an impoverished state of that fluid: all conditions which we have seen to exist in delirium tremens.

There can, I think, then, be no doubt that the pathology of delirium tremens, and of the renal epileptic delirium, is essentially the same.

Nor does it appear to be at all unreasonable to view the *simple* epileptic delirium as of the same nature,—that is, due to a contaminated and impoverished state of the blood. In the Lumleian Lectures last year I brought forward several facts and arguments to show that both chorea and epilepsy are diseases of humoral origin; that the epileptic paroxysm is probably caused by the accumulation of a morbid matter in the blood, which excites the polar force of the nervous matter of the brain, and so may give rise to delirium, or convulsions, or coma. If this morbid matter be determined in certain quantity to the centre of intellectual action, we have delirium; if determined at the same time, in the same or in greater quantity, to the centres of emotion and of sensation, we have convulsions and coma.

The hysterical delirium is much of the same nature as the epileptic,—just as the hysterical paroxysm is nearly allied to the epileptic fit, and often so much resembles it as to render the diagnosis a matter of considerable difficulty. There is no one of the nervous diseases which more clearly belongs to the class of humoral diseases than hysteria. It would be easy to adduce a host of facts in proof of this statement. Nor can we ever, in the most aggravated states of hysteria, ascertain the existence of any morbid process in any part or parts of the body which can at all account for the phenomena. It is common to attribute them to a sympathy with the uterus; but there are objections which appear to me to be fatal to this doctrine. First, the organ which is supposed to be thus capable of disturbing the nervous system is but poorly supplied with nerves, and has a very slight connexion with the nervous system; secondly, in many of the cases of even the most severe hysteria, the uterine affection is *nil*, or of a very trifling nature; thirdly, we have an affection of precisely the same nature in men, without any derangement in the generative organs, or at least without such derangement as may be viewed as a cause of the nervous symptoms.

The uterus, however, may be, and often is, a source of contamination of the blood. There may be a great drain from the uterus by excessive menstrual flux, which impoverishes the blood; some of the morbid secretions formed at the uterus may re-enter the circulation, and so contaminate the blood; or again, the ovaries may be defective in their action, and so matters which ought to be separated at each catamenial period may remain in the circulation, and contaminate the blood. In this way the generative organs become a source of much disturbance to the general nutrition of the body. But, besides all this, there is frequently in hysteria a very imperfect action of the digestive organs, and the liver and kidneys are much deranged; and the moral state into which patients of this kind are apt to fall is very favourable to maintaining this enfeebled state of the digestive function and of general nutrition.

It is not, therefore, in any degree, an unreasonable view of hysterical delirium to attribute it to a similar or analogous state of the system to that which produces epileptic delirium.

It will not be difficult to apply the same reasoning which has led me to these conclusions respecting the pathology of the epileptic and hysterical de-

lirium, to that of the rheumatic and gouty forms of delirium.

In the latter state the recent researches of Dr. Garrod render it highly probable that in every instance lithic acid exists in the blood in such quantity as to justify our regarding it as "poisoned" by that material, or by some compound of it. What is the nature of the poisonous material in the rheumatic states we have yet to determine; but it cannot be doubted that some analogous matter to that of gout is present in the blood. In both states the aspect of the patients denotes a certain poverty of blood, which is greater in the more advanced stages of the disease, and which is also more manifest when bleeding and other active antiphlogistic measures of treatment have been pursued.

In the case of a robust man, on the third day of rheumatic fever, who had not been bled, and with whom no active antiphlogistic treatment had been adopted, the red particles had fallen to less than 100 in 1000 parts; and, when we consider the pallor of patients in the advanced stages of this disease, it cannot be doubted that its tendency is to impair the regenerating power of the red particles.

If now we add to this, that in rheumatic fever the symptoms of delirium generally occur simultaneously with the lighting up of an inflammation of the heart, we shall be led to compare the sudden appearance of delirium in rheumatic fever, under these circumstances, with the sudden appearance of delirium tremens under the influence of exhaustion.

The effect of inflammation of the heart, more especially when it assumes the form of pericarditis, must be to weaken its power,—to induce a state of imperfect palsy. This, indeed, must be the case, unless we suppose the heart to be exempt from the laws which influence other muscles. We often have proof of this in the weakened, depressed, intermittent state of pulse which accompanies and betokens the first invasion of pericardial or endocardial inflammation.

Thus we may lay it down that the delirium of rheumatic fever is due to the brain being supplied with an impure blood which tends to derange its nutrition, and that this derangement of nutrition will take place in a more decided manner if the heart be enfeebled, so that the blood is feebly propelled, and the brain is imperfectly supplied. A similar derangement of nutrition affecting the centre of emotion (the region of the corpora quadrigemina) will give rise to those choreic convulsive movements which we know sometimes accompany the first invasion of delirium, or occur independently of it.

The cerebral battery being excited by a thin watery blood, deficient in its colouring matter, and perhaps also in some other of its staminal principles, and which at the same time contains a poisonous element, it is easy to understand how it will exhibit more rapid and active chemical and physical changes; and, consequently, will develope the nervous force with a rapidity and force which disturb the mind, exciting repeated and irregular acts of thought, and refusing to be controlled by it.

In gout we have likewise the deranged state of blood, especially in the more aggravated cases—as in the asthenic gout: there is the same poorness of blood, with deficient colouring matter, and the blood is poisoned by lithic acid, or whatever other material it may be which forms the *materies morbi* in this disease; and, although in these cases we have not the acute endocardial or pericardial affections which are apt to occur in rheumatic fever, the heart's power is very apt to be weakened, as if the nutrition of its muscular structure were much enfeebled, or from chronic valvular disease interfering with the circulation through the heart. Intermission of the pulse is a frequent symptom of a gouty state of the system; nor is it by any means a necessary attendant upon valvular disease, but will manifest itself in cases where the valves are perfectly sound. In such cases it would seem to arise from some impairment of the innervation of the heart or of the muscular force of the heart,—due, probably, to the depressing influence of the gouty poison.

Thus, then, I would lay it down, that, in the rheumatic and gouty forms of delirium, the disturbance of the brain's function is due to the depression of the heart's action, caused by inflammation in the one case, and by the depressing influence of the poison of gout in the other. The state of brain which causes delirium in these cases is a state of irritation arising, not from sympathy with the inflammatory irritation of the heart, but, as Dr. Watson and Dr. Burrows express it, from a disturbance of the cerebral circulation occasioned by embarrassment of the heart's action; and I would go further, and say, that not only is it due to an embarrassed action of the heart, but to the circulation with diminished force of an impure and impoverished blood through the brain.

And to the same cause, namely an imperfect supply of blood, and an impure and impoverished state of that blood, and to a consequent exalted or depressed polarity of the nervous centres,—would I attribute all the other abnormal nervous phenomena which accompany these rheumatic and gouty affections; the choreic and the tetanic convulsions,—the coma; for such a view is more in accordance with the production of these affections in ordinary chorea and tetanus, and, on this account, more reasonable than that which assigns them to a peripheral irritation propagated along certain nerves to the nervous centre in which they are implanted, and also because the evidence to prove that such a peripheral irritation really exists in every case is very imperfect.

It will be remembered, that delirium is apt to take place in rheumatic fever, when the internal inflammation is pleurisy or pneumonia, without any cardiac inflammation. Here the element of the embarrassed heart's action is wanting, unless we suppose that a severe pleurisy or pneumonia would embarrass the action of the heart. And again, it occurs when there has only been slight endocarditis, and when there has been no internal inflammation at all. So that we may infer, that the element of the embarrassed heart's action is less important in the production of the nervous phenomena, than that of an impoverished and poisoned blood.

In the delirium of erysipelas and of typhus fever we have the blood poisoned by the erysipelas or the typhus poison, and impoverished during the period of incubation of the poison, and in many instances by influences deleterious to health, existing prior to the reception of the poison, which, doubtless, rendered the patient a more ready prey to its destructive power. Hence, then, the pathology of these forms of delirium must be regarded as essentially the same as that of the others to which I have referred. And the more depressed the patient is at the time of the introduction of the poison, and the poorer the condition of his blood, the more likely will he be to suffer from delirium.

It will readily occur to any one disposed to object to these views of the pathology of delirium, that the traumatic delirium is not so readily explicable on these principles. What connexion, it will be asked, is there between a compound fracture and a poison in the blood? How can a capital operation in surgery develope a poison in the blood?

I think, however, that it may be affirmed that in cases of severe injuries, fractures, burns, and operations, the elements which, in the forms of delirium we have been considering, contribute to the development of the delirious state, are present. Many of the patients who suffer in this way have been free livers, and have their blood more or less contaminated by gouty or rheumatic, or, in younger subjects, by scrofulous matter. Moreover, the shock of the operation, or other injury, the loss of blood, the confinement consequent upon it, the low diet and antiphlogistic treatment which may have been adopted, enfeeble the heart's action and impoverish the blood. It is well known that traumatic delirium is much more apt to occur in persons who had previously been addicted to habits of intemperance, or in persons of damaged constitution and enfeebled health, than in sound and vigorous subjects.

Pathology of Coma.—If these views be admitted respecting the pathology of the principal forms of delirium, there will be no difficulty in determining the true pathology of the corresponding forms of coma, excluding the traumatic variety and that from compression.

We exclude these forms, because their cause is clearly local. In the one case the suspension of the action of the brain is due to the influence of shock on the nervous matter. For a certain time, varying in duration according to the violence of the injury sustained, the vital changes of the brain seem to be suspended: they then recover themselves more or less gradually. A similar phenomenon often occurs in physiological experiments. In pithing a frog, if the operation be done rapidly and roughly the animal remains perfectly motionless for some time, no reflex motion whatever can be excited by any mode of stimulation. The animal lies in this state for a certain time, when its reflex actions return, the paralysing influence of the shock caused by the division of the spinal cord having passed away.

Again, in the coma from a depressed fracture of the skull, or from an effusion of blood or serum, the cause is clearly local, as is shown by the rapidity with which it passes off when a surgical operation has been successful in elevating the depressed and compressing bone, and by the incurability of the cases where a large intracranial hæmorrhage is the compressing cause.

But in all the other varieties of coma the close analogy of the clinical history points to a close analogy of cause and of pathology; and this is clearly shown in the toxic delirium and coma. A poisonous agent capable of exciting delirium, when administered to a certain extent, will produce coma, if given in a larger dose; and it may be stated that *all* the poisons capable of producing delirium will also cause coma. Take, for example, chloroform: in the early stages of its administration we have delirium; in the later, when more chloroform has been given, coma; so, also, alcohol; so, likewise, opium and stramonium; and the same remark applies to all those agents which exercise a direct action on the brain.

Coma, then, is a higher degree of poisoning than delirium. In the latter case the poison simply irritates, deranges the nutrition of the brain, so as to cause an abnormal and irregular mode of action of that organ. In the former case it paralyses.

If, now, we admit the humoral nature of the epileptic and hysteric paroxysms, and that the epileptic and hysteric forms of delirium are the result of a disturbed nutrition of the brain by some poisonous matter in the blood, it is clearly highly reasonable to view these forms of coma as but higher degrees of disturbed nutrition from a larger dose or a greater virulence of the poison.

And this reasoning so obviously applies to the rheumatic and gouty coma, that it would be quite superfluous to occupy time with further remarks upon them.

Only admit the humoral view of the various forms of delirium which I have described, and the explanation of the corresponding varieties of coma follows as a matter of course.

And I must here observe, in concluding my remarks upon the pathology of delirium and coma, that, so far as I know, no explanation has as yet been given of them, so comprehensive and so accordant with the striking analogies in the clinical history of the various forms of those affections as this, which I may designate the humoral view of the pathology of delirium and coma.

On the Treatment.—I had hoped to have been able to have reviewed the various modes of treatment proposed or adopted for these affections; but the limited space of time allotted to these Lectures compels me to confine myself to a very brief reference to one or two important points.

And, first, I would remark, that the facts which I have elicited as to the non-inflammatory nature of infinitely the greatest number of cases of delirium and coma, denote how unnecessary is the antiphlogistic treatment, and how mischievous it may be in most of them.

And, as to the employment of general or local bloodletting, it is a practice not to be justified by anything in the clinical history or the morbid anatomy of these affections, unless perhaps in the truly inflammatory forms, or where some inflammatory complication may exist. I would here remark, that bleeding tends to the production of that state of blood which is favourable to the development of the comatose or delirious states. It has long been recognised by various observations upon the quantitative analysis of the blood, that bleeding tends to increase the water, to diminish the specific gravity of the serum, and to diminish in a very marked manner the amount of the coloured corpuscles,—to

induce, in fact, a state of blood highly favourable to the exosmose of its fluid parts among the tissues, and which is apt to produce a special variety of delirium and coma, (the anæmic,) and which, it is reasonable to conclude, would be very apt to increase the intensity of other forms of delirium and coma.

I was anxious to ascertain the effect of repeated bleedings upon the blood in a case where food has been at the same time freely given; and accordingly I tried the following experiments, with the kind and able assistance of my friend Mr. Lionel Beale. A large and well-nourished dog, apparently in perfectly good health, was fed daily on two pounds of meat and a quart of milk. He was bled on four successive days to the extent of six ounces each day, and the blood carefully analysed. The blood drawn in the first bleeding, on the 6th of April, contained, in a thousand parts, 142·85 corpuscles, 2·42 fibrin, and 783·79 water. That taken by the second bleeding (on the 7th April) exhibited a diminution of the corpuscles to 113·54, and an increase of the water to 810·89, and of the fibrin to 4·72. On the third bleeding (April 8th) the corpuscles had fallen to 110·58, and the water had increased to 815·18, the fibrin being 4·34. And on the fourth bleeding the corpuscles were 106·96, the water 813·04, and the fibrin 3·99.

Thus, notwithstanding the high feeding, the obvious and marked tendency of the withdrawal of blood from the system is to increase the water and diminish the corpuscles, while the fibrin is evidently not reduced, but rather increased.

So much for bleeding. Generally speaking, however, an antiphlogistic system is inapplicable in delirium and in coma. We have ample confirmation of this in the results of experience in delirium tremens. I believe practical men are now pretty well agreed upon this point. And what applies to delirium tremens applies also to all the forms of delirium. The approach of delirium should be the signal to the practitioner to look to the support of his patient: this is particularly the case in the delirium of rheumatic fever and of gout, and in that of erysipelas and typhus.

I must add one word before I conclude, as to the use of opium. In certain forms of delirium, the cautious and watchful use of this drug is of the utmost value; in others it is attended with danger. It appears to me that in those cases of delirium which have a tendency to pass into coma, opium should be avoided, or used with the greatest caution; whereas in the wakeful delirium it is of great value, and may often be employed very freely, not only with impunity, but also with great benefit. In the epileptic and hysterical delirium, and in that from gout, opium, if used at all, must be employed with great caution. On the other hand, in the delirium of rheumatic fever, and in that of anæmia, in the traumatic delirium, and in delirium tremens, it is invaluable—of course with certain restrictions.

I regret that the time allotted to these lectures obliges me to conclude here my rapid survey of the pathology and treatment of delirium and coma. Much more might be added to what I have said, especially as regards the treatment; but, I shall be content if I have succeeded in calling the attention of the Profession more particularly to the intrinsic nature of these affections,—a subject which does not appear to me to have received from them all the attention which their importance deserves; and I conclude by thanking you, Mr. President and Gentlemen, for the kind and patient attention with which you have received my remarks during these lectures.

Fly Paper.—The authorities at Brussels have threatened to proceed against all parties selling an arsenicated fly paper, considering its sale to be very dangerous. They call attention to the following excellent clause in the law of the 12th March, 1818:—"No one may sell any poisonous or soporific substance, except on a written prescription, duly signed by a doctor of medicine, surgeon or accoucheur, druggist, or some other known person, the purpose for which these substances are required being also known, under a penalty of 100 florins fine, the fine to be doubled at each repetition of the offence. The prescriptions ordering these substances are to be preserved by the dispenser, under a penalty of twenty-five florins fine.—*La Santé.*

ORIGINAL CONTRIBUTIONS.

CASES OF POISONING BY COLOURED CONFECTIONERY, WITH REMARKS.

By H. LETHEBY, M.B., Lecturer on Chemistry in the London Hospital.

Hannah Martin, aged 4½ years, Jane Embden, aged 10 years, and Amelia Leir, also aged 10 years, were admitted into the London Hospital on Sunday, April 28th ult., suffering from violent sickness and great prostration of strength.

It appears that they had bought some sugared ornaments and coloured confectionery from a Jew in Petticoat-lane; and that soon after they had partaken of these sweetmeats they became very sick, complained of a burning sensation in the mouth, fauces, and œsophagus, of great pain in the stomach and abdomen, and were seized with violent retching, which was attended, after a few hours, with profuse purging. When they were admitted into the hospital they were seriously ill, for the features looked pale and shrunk, the extremities were deathly cold, the pulse was, in each case, small and feeble, and the surface of the body, especially of the last-named child, was covered with a clammy perspiration. Emetics of sulphate of zinc were instantly administered, and the vomited matters were saved for analysis. Antidotes of milk, white of egg, and demulcents, were also given in great abundance; and, after the sickness had subsided, they were permitted to sleep, from which state they awoke considerably revived.

The vomited matters were evaporated to dryness, and the solid residue, not amounting to two drachms in weight, yielded abundant evidence of the presence of arsenic, copper, lead, iron, and zinc,—all of which metals, excepting the last-named, had, doubtless, been derived from the confectionery of which the children had partaken.

On making inquiry into the matter, we were informed, that between thirty and forty children had been attacked in a similar way, and that they had all purchased sweetmeats from the Jew in question; but it does not appear that he was acquainted with the poisonous nature of his merchandise, for he had purchased it (so he stated) as the refuse stock of a large and very respectable firm in the City.

It is not generally known, that the ornamental kinds of confectionery are frequently tinted with poisonous pigments; that the greens, for example, are commonly produced by means of arsenite of copper, (Scheele's green,) verdigris, or a mixture of chrome and prussian blue; the yellows, by chromate of lead; the reds, by vermillion, (bisulphuret of mercury,) or oxide of iron; and the whites, by carbonate of lead, oxide or carbonate of zinc, chalk, or sulphate of baryta; and that, frequently, the fine frosting which covers the commoner kinds of twelfth-cakes, and the hard white sugar of comfits, contain from 10 to 30 per cent. of plaster of Paris or of whiting.

I have been induced to record the preceding cases, not so much for the purpose of exhibiting the nature of the symptoms observed, as with the view of showing the necessity for some legislative interference in a matter of what may truly be termed, wholesale public poisoning; for, without such evidence before the mind, it would not be credited by the great bulk of the community, that many of the prettiest and daintiest looking confections of the dessert-table are like the choice luxury of the Queen-mother, but too often the source of danger to those who partake of them.

Within the last three years no less than seventy cases of poisoning have been traced to this source; and how many, may we ask, have escaped discovery? In the month of September, 1847, Mr. Hetley, who is the visiting surgeon of St. Marylebone Infirmary, reported in the *Pharmaceutical Journal*, that he was requested, on the 14th of that month, to go as quickly as he could to the relief of some persons who had been taken suddenly and dangerously ill. He found three adults and eight children severely affected with vomiting and retching; the angles of their mouths and linen being coloured green by the ejections. On seeking into the cause of this, he was told that one of the children had bought two pennyworth of some coloured confectionery ornament, of which they had all partaken. Some of the offending article (a thin cake of sugar and Paris plaster, covered with a layer of bright green) was, however, found, and it at once made the case clear.

In commenting on the above, Dr. Guy states, that "an accident on a larger scale, but happily unattended by any fatal result, occurred in our own experience,—one of the patients having been brought to the King's College Hospital on the day after the accident. An ornamental green basket, after having been used at an evening party, was given to one of the attendants, who distributed the fragments among the inmates of a large workshop. Severe vomiting and purging was the result. On inquiry at several confectioners, we ascertained that arsenite of copper is commonly used to give a green colour to confectionery, and an analysis of a fragment of the basket confirmed this statement." (*Ranking's Abstract*, Vol. VII., p. 347.)

At the very time that the preceding article was going through the Press, an inquiry was being instituted at Northampton before the county coroner, Mr. Hicks, respecting the death of Mr. William Cowfield, who, with twenty others, was poisoned at a public dinner given in that town, on the 7th of June, 1848, when it appeared that deceased had partaken of a blanc-mange, the top of which was coloured with emerald green, (arsenite of copper,) and of which he died.

In the month of February, 1849, Dr. W. Fergus published the case of three children, who were poisoned by eating the green-sugared ornaments from a twelfth-cake. (*Med. Gaz.*, p. 304.) And, in the month of June following, Professor Christison exhibited to the members of the Edinburgh Medico-Chirurgical Society a green powder, which he had purchased at a confectioner's in that city. It was a portion of the stock employed to colour jellies, &c.; and, on examination, he found that it consisted of sugar mixed with verdigris and arsenite of copper. His attention was drawn to it by the severe illness of two maid-servants who had partaken of some jelly coloured with it. (*Lond. Journal of Medicine*, Vol. I., p. 792.)

Two years since Professor Louyet, of Brussels, wrote to inform and caution us concerning the fact, that bon-bons, coloured with an unusual quantity of chromate of lead, were being manufactured largely in London, and exported thence to Belgium. The bon-bons in question consisted of a species of aromatized sugar, coloured yellow throughout its mass, exhibiting the scent and flavour of lemon, and encrusted with a species of transparent red-currant shell. Very recently some cheap almond and caraway comfits have been sold at the grocers' and confectioners' in many parts of London, which are coloured yellow by means of this pigment, for I have detected as much as half a grain of chromate of lead in three of these comfits.

This dangerous practice of colouring sweetmeats, &c., with poisonous substances is, unhappily, not peculiar to the English; for very recently some cases have been reported by MM. Houze and Jaubert, in which four persons were seriously attacked after having partaken of some bon-bons which were coloured with arsenite of copper. One of the patients (a child aged six years) died from the effects of the poison, after an illness of two days; and a second child was brought so near to the grave that she did not recover for two years after the accident. So, again, it is recorded by Chevallier, that at a breakfast given on a festive occasion by an eminent Parisian lawyer, a boar's-head was decorated in a very artistic manner with masses of fat, which were coloured of a lively red and green tint. One of the guests, who was well acquainted with chemistry, suspecting that the pigment might be poisonous, retained a portion of the fat for further examination, and he found that it contained about 2 per cent. of arsenite of copper. (*Journal de Chirur. Med.*, Jan. 1847.)

All these facts, and there are many others of a like character which relate to the trade of the pickle-merchant, are sufficient to show that, however difficult it may be for the Home Secretary to give a correct definition of a poison, or even a complete list of poisonous substances, it is high time that the Government should take some steps to protect the lives of the community from danger,

by imposing a sufficient check upon the present unrestricted sale and use of these, and such as these, the commoner poisons.

ON THE TREATMENT OF STRICTURE OF THE URETHRA BY THE PERINEAL SECTION.

By HENRY SMITH, Esq., F.R.C.S.

(Concluded from page 383.)

Mr. Syme has clearly pointed out, in his late Work, and it must be obvious to every surgeon who is brought into frequent contact with cases of stricture, that certain instances are to be met with in which the process of dilatation, however carefully carried on, will be of little or no actual service, in consequence of the disposition to contraction. An instrument of considerable size may have been introduced at one time in such a case, and in a few hours or days only one of the smallest size can be introduced, and that with great difficulty, and with great suffering on the part of the patient. This state of things will go on for years and years. I have received with interest and sympathy the graphic description of the long train of sufferings which patients have drawn up for me, both orally and in writing. It is under such circumstances that Mr. Syme has recommended the free division of the urethra by the perinæum. It must be admitted that inestimable benefit has resulted to some of the patients who have undergone this operation. The first case recorded in Mr. Syme's book, and the two cases I have here recorded as occurring in the private practice of Mr. Fergusson are satisfactory evidences of this; nevertheless, the fact that success has occurred in some instances, ought not to authorize the surgeon to adopt it so freely as has been recommended, if it is shown that death may result from it, and that there are other means in his power, by which he may attain the same result with equal facility and with much less danger to the life of his patient.

The question, then, is, what is this equally efficacious and much safer remedy? I can have no hesitation in stating, that caustic has been found, in the hands of those who have employed it, to be a most valuable and potent remedy in the cure of strictures of the most severe description, and I shall conclude these observations with an inquiry into the merits of caustics in stricture, and by reference to the experience of others, and by the relation of instances which have occurred in my own practice. I hope I shall be able to prove the truth of this assertion. The plan of treatment by caustic was originally adopted by John Hunter, in a case of stricture, which resisted the ordinary attempts to cure it, and was followed by complete success. Sir Everard Home continued the practice of his illustrious master, and doubtless in many instances he gained much success, but unfortunately that surgeon used the remedy too indiscriminately, and thus was the means of bringing it into much and undeserved discredit; in fact, to such an extent was this remedial agent abused, that the majority of Surgeons have distrusted and denounced it, without even having given it a fair trail, or in many instances without having had any experience of it whatever. There are some Surgeons, however, who have fairly and amply tested the value of the caustic treatment, and their experience has led them to the conviction that it is a valuable and efficacious means in the cure of most obstinate forms of stricture. But to Mr. Wade, more especially, is the merit due of having tested the value of potassa fusa; and of having pointed out clearly the manner and the cases in which this agent should be applied. Every one who reads that gentleman's book on the Treatment of Stricture with care, must confess that the records he has there given us are most satisfactory, and that his experience has been amply sufficient to warrant him in recommending the plan of treatment so strongly as he does.

In the work which I have before alluded to, Mr Syme has not contented himself with the advocacy of the free division of permeable strictures, but he has taken the opportunity of endeavouring to bring "a heavy blow and great discouragement" upon the use of caustic. The opinion of a man like Mr. Syme is entitled to great respect, and he, doubtless, thinks that his *veto* will be sufficient to deter men from the use of caustic, and probably it would have some such effect if it could be shown that the opinion arrived at was the result of a careful and patient experience; but unfortunately Mr. Syme does not inform the reader whether or not he has ever tried the remedy; he merely gives an opinion, which opinion appears to be founded, partly at least, upon the statements of other persons. The following quotation, which I copy from Mr. Syme's book, will, I think, bear me out in these remarks:—

"With regard to the use of caustic for the cure of stricture, it must be obvious that all which has been said as to the injurious effects and dangerous consequences of introducing the most simple dilating instruments into the urethra will apply with tenfold force to the employment of bougies 'armed' with escharotic substances, or any other apparatus constructed for the conveyance of such irritating agents. But independently of this objection, I do not hesitate to express my persuasion that a real organic stricture cannot be removed by caustic; since, even admitting that the agent could be accurately applied, the destructive effect of the nitrate of silver is so limited as to be quite inadequate for the purpose, while that of potass is so diffused, that in the event of destroying the stricture, it must cause a worse one through the unavoidable loss of substance attending its operation, and the consequent contraction in healing. On the whole it seems more reasonable to conclude that in the cases of alleged cure by caustic, there was no real stricture in existence, than to suppose that so improbable or rather impossible an achievement had been accomplished." (a)

As I have before remarked, if the opinion which is contained in these remarks had been shown to be the result of actual experience of the remedial agent so unequivocally denounced; it would, from the author's high position, carry with it great weight; but, as Mr. Syme does not tell us, that he has ever used caustic, we are naturally led to conclude, that his "persuasion" is founded rather upon the prejudices, which are so commonly entertained on this subject, than upon actual observation, consequently his somewhat bold and illiberal assertions must be looked upon as of little real value. It would be hazardous for me to make this remark, unless I could show ample reason for so doing; and could point out that caustic is a most valuable and efficacious agent in the treatment of stricture, and could disprove Mr. Syme's assertion, that "a real organic stricture cannot be removed by caustic."

By the side of Mr. Syme's book, on the table before me, is the work of Mr. Wade before alluded to, and I find that that gentleman, after the experience of twenty years and upwards, in the use of potassa fusa, makes the following statement:—"Having been, by far the greater part of my professional life attached to an extensive public Institution, where stricture cases are of frequent occurrence, I have had ample opportunities of witnessing the effects of different kinds of treatment in that disease. The result of my experience is, that more may be done in bad cases of stricture with the least chance of injury, by a judicious employment of the potassa fusa, than by any other means." (b)

Now this is not merely an unfounded assertion on the part of Mr. Wade; for, in the same work, are clearly and (I have no doubt, from what I have the pleasure of knowing of the character of that gentleman,) faithfully recorded some of the results of the experience he has had with potassa fusa. Numerous instances are there given, which must be sufficient to convince any liberal and fair judging person, that the agent, when properly and timely employed, is one of very great efficacy and value; and, as Mr. Wade's opinions are shown to be the result of an extensive experience, they should be looked upon as much more important and conclusive than the *dicta* of Professor Syme, who has not yet shown that he has had any personal experience of the remedy. And, moreover, with regard to the "injurious effects and dangerous consequences" of caustic, I find the following statements of Mr. Wade, which may be apposite:—"In the whole course of my experience with this remedy in stricture, I have never known hæmorrhage of any consequence to ensue from its application * * * *." Strangury has not followed the application of the potash in my hands, unless that symptom had been previously present, when the difficulty of passing the urine may sometimes have been slightly increased for a few hours; but it generally affords marked relief under such circumstances." P. 42.

Since I have been paying more immediate attention to the nature of treatment of stricture, I have had opportunities of ascertaining the opinions of surgeons upon the use of caustic; and I must confess, that in many instances I have heard this plan of treatment dreadfully abused; but, whenever I have heard it thus denounced, I have asked this question,—"Have you ever used it?" The answer has been invariably, "No;" but, on the contrary, when its value has been assented to by a party, then I have found that the remedy has been tried. This fact, by itself, clearly proves how much prejudice has had to do with the denunciation and rejection of this agent. A very striking instance of this occurred only the other day. I was in conversation with one of the Surgeons to a large hospital, and on the subject of the treatment of strictures by potassa fusa being mentioned, this gentleman told me that he had very lately tried it in some cases, and that he had found it answer admirably. On my asking him the question, if he had, until he had used it, been strongly prejudiced against it? he candidly answered, that he had been; but that now his opinions were altered. Prejudice is all-powerful with the mind of man; it clings to it as firmly and obstinately as the ivy to the crumbling wall; it fetters the understanding and the reasoning powers, and if it asserts its dominion in the minds of the practitioner of the healing art, it must to a great extent prevent the advancement of true learning, and do injury to the interests of humanity.

Still adhering to my original purpose of not relating any case but what has fallen under my own personal observation, I shall now detail instances in proof of the efficacy of potassa fusa in the cure of stricture.

J. J., a gentleman aged 40, came under my care at the latter end of November. He was in a very bad condition from the sufferings which had been occasioned by a stricture; and was most anxious to obtain some relief. It appeared that the stricture was first detected upwards of twelve years ago, and was dilated by bougies, used both by a Medical practitioner and by himself. Repeated attacks of gonorrhœa, however, prevented the cure of his disease, and rendered it much worse. As his symptoms were all increasing, he applied to the late lamented Mr. Morton, in the summer of last year. At first, that gentleman could pass no instrument through the stricture. After a time, however, the stricture was so far dilated as to allow a No. 4 bougie to pass. The patient then went into the country, and resorted to his former convivial habits for a month, when he again returned to Mr. Morton, who tried several times, but was unable to pass any instrument whatever. The symptoms were now much aggravated; the patient suffered very much from the difficulty in making water, and the straining efforts which he was forced to make. His bladder became very irritable, and prevented his rest at night; and occasionally his urine only came away in drops. The mind of this gentleman became much troubled, and being of an excitable and irritable temperament, he resorted to stimuli, which increase his complaint. To use his own words: "I then thought it was all up with me, and felt strongly tempted to blow my brains out, for I considered it an impossibility to be cured." This was just after the death of Mr. Morton; and in this condition he came to me. On examination, I found the urethra excessively irritable, and a tough stricture 5½ inches down. With the greatest patience, I could not get through it, the instrument getting occasionally into a false passage on the left. Four several times I tried, with great patience, but could not pass the smallest instrument; and it was now very evident that something decisive should be attempted, as he had suffered several times from retention of urine, and there was great fear of extravasation occurring in one of his straining efforts to relieve the bladder.

(a) Syme on Stricture, p. 53.
(b) Wade on Stricture, 2nd Edit., p. 170.

As he objected to have another opinion, which was proposed to him, I considered it to be my duty to state to him the two methods which remained, and to permit him to choose either plan of treatment, that by free perineal incision or the employment of caustic. As he was willing to undergo either, I determined upon the use of potassa fusa as the least dangerous. On the first application, which was done December 5th, considerable pain, some hæmorrhage, and complete retention occurred, but this was only to be expected, and was soon remedied by warm bath, &c. On the fourth application the stream of urine had become quite large, and much relief was obtained. As he had obtained this partial relief, and it being Christmas time, he kept away for three weeks and came to me on January 16. I still could not get any instrument into the bladder, but fortunately there was no irritability of the urethra. I applied the potassa fusa, repeated it on the 19th and 22nd, without its causing any disturbance whatever, and on the 25th the bougie used (No. 6) went through the stricture into the bladder, which I directly satisfied myself of by passing a No. 6 catheter, and drawing off the water. On the 28th I passed No. 8, on the 30th No. 10 with the greatest ease, and I occasionally passed the same instrument afterwards. Since this fortunate event, the patient, who has a very poetical turn of mind, has written a letter full of gratitude to me, and the benefit he has received will be best judged of by quoting his own words. "And now, instead of being encompassed by the shadow and darkness of death, I feel that there is hope, life, and joy for me."

It is very evident that, in this instance, not only did a "real organic stricture exist," but that it was entirely destroyed by the potassa fusa, after a very fair and patient trial had been given to dilatation both by Mr. Morton and myself, and it would, perhaps, be a difficult matter to select a more satisfactory proof of the efficacy of the remedy employed. Had I been as much prejudiced against the use of caustic as so many surgeons appear to be, I should have resorted to perineal incision, and what the consequences might have been it is impossible to tell; at all events, the treatment by incision, even had it not been fatal, would have confined the patient to his bed for some weeks, whilst that by caustic need not prevent a patient from doing his ordinary business a single day; hence in this respect alone does it possess a great superiority.

It may be objected that, although potassa fusa may be efficacious in removing a tough and indurated stricture such as I have just related, it will not have the same power of overcoming those cases which are marked more by their tendency to contract again after instruments have been passed than by their toughness and imperviousness to instruments. I will, however, mention an instance of this nature, which will be a sufficient answer to such objection.

George Busling, aged 27, an intemperate man, and exposed to vicissitudes of weather, first noticed symptoms of stricture about three years ago, after having had a long attack of gonorrhœa. He applied to a surgeon, who had him under treatment for some time, and apparently cured the stricture. Some few months afterwards I saw him, just after this treatment had been pursued. I was then enabled to pass a full-sized instrument into his bladder without difficulty. On the 12th of April he applied to my friend, Mr. Rice, of Leicester-place, who, on examination, found the urethra contracted again, and very irritable; he was unable to pass the smallest bougie through the stricture. On the 14th a small bougie was passed through the stricture. I saw the patient this day with Mr. Rice; and, as it was one of those cases of stricture with disposition to recontraction, I advised the application of potassa fusa to the face of the stricture. I therefore applied the caustic by means of the wax bougie; the patient suffered but little pain, and had no tendency to retention. On the 16th, Mr. Rice attempted to pass the smallest wax bougie, but he could not do so; he then applied the potassa fusa again. 18th.—A good deal of blood had passed from the last application; the potassa fusa was again applied. 20th.—He still continued passing blood. On the 23rd, I saw him in company with Mr. Rice; the patient had not suffered much from the use of the caustic; and, on examination, Nos. 5, 7, and 9 catheters were successively passed into his bladder. On the 1st of May, Mr. Rice sent him up to my residence, and I was enabled, with the greatest ease, to pass the largest catheter in my case. This was just sixteen days after the commencement of treatment by potassa fusa.

I shall not detail any further cases, for these will suffice, I should hope, to disprove the most unwarrantable assertion, that a stricture cannot be removed by caustic. I could, if I chose, mention cases which have lately occurred, where patients were about being submitted to the knife, and caustic has been tried with success. I could mention such a case where the patient, after having been cured by potassa fusa, on hearing of the death of a man who had been cut for stricture, straightway went to a church as soon as he could get out, and returned thanks for having escaped so possible a termination in his own person; but these are not necessary. I would earnestly advise all those who are sceptical on this matter to read with care, and with an unfettered judgment, that very valuable work by Mr. Wade; and, if they will then make trial of the remedy in such fitting cases as fall under their care, I am sure they will be convinced that the potassa fusa is a most valuable agent in the treatment of some of the worst forms of stricture.

The conclusions, then, which I think I may reasonably arrive at, from what has been so imperfectly detailed in this paper, are these:—

First: Section of a stricture by the perinæum is a proceeding which is of great value in certain instances; that the cases, however, are comparatively rare which require its performance,—in fact, that it is only absolutely necessary in those *complicated* forms of stricture where no instrument whatever can be passed into the bladder, and in which most serious and even fatal results may ensue from not resorting to some such decisive measure.

Secondly: That, as it has been proved that death has resulted from the operation of opening the urethra, the proceeding should not be put in force in cases where an instrument can be passed into the bladder, except under some very peculiar circumstances, and these exist, where all other remedies have been tried and have failed, and when the patient, with a full knowledge of the risk he may run, is willing to share with the surgeon the responsibility of the case.

Thirdly: That the potassa fusa is a remedy which is of great efficacy in the treatment of the most severe forms of stricture, and that it is a duty on the part of the surgeon to try it, when there is time for its action, before resorting to a cutting operation, as thus he will be only acting on the sound and wholesome principle, of using the least dangerous of two methods, probably equally efficacious.

In conclusion, I have only to state, in all humility, that the opinions here offered are not the result of a hasty judgment. I have embraced with eagerness every opportunity which has offered itself of studying this subject, both by observation at the bed-side, and by careful perusal of those works which have been written respecting it. And it has not been without frequent and serious reflection, with an unprejudiced mind, that I have set myself to the task which I feel is so imperfectly performed. Consequently, I may hope, that, although there is much which is erroneous, and which may not stand the test of a more extended experience, there is some truth and soundness in the views which are here offered. The subject is one which is so important and so extensive, that it requires, for its proper elucidation, great experience and unprejudiced judgment, which, of course, it is not in my power to claim; yet, if every one who has had any considerable opportunities of seeing the results of the methods of treatment of stricture I have here been inquiring into, would offer his quota, a large mass of facts would be accumulated, from which inferences may be drawn, which would prove highly useful to the surgeon, who is so frequently called upon to treat one of the most interesting and serious affections which afflict a vast number of those who come under his notice.

I must beg to offer my thanks to those gentlemen whose names are mentioned in connexion with the cases narrated, for their kindness in permitting me to make use of them. To my kind and respected friend Mr. Fergusson I am especially indebted; he has given me every opportunity of studying the cases which have occurred to him, both in his public and private practice. Such an immense advantage to a young surgeon I am deeply sensible of. From Mr. Wade I have received valuable information, both personally and from the perusal of his book, respecting the use of potassa fusa.

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OBSERVATIONS ON TRANCE, OR HUMAN HYBERNATION.

By JAMES BRAID, Esq., M.R.C.S., Edinburgh, &c. &c.

(Concluded from page 353.)

The next case I shall adduce is one furnished to me by C. E. Trevelyan, Esq., of the Treasury. He was not an eye-witness of the transaction, but the source of his information seems to be highly satisfactory. He says: "I perfectly well recollect, that when I was acting as political agent at Kolah in 1829—30, the Rajah Rana's Vukeel, who was a very respectable, and, for a native Indian, a very truthful man, told me one day, when he happened to be with me on business, that he had been present that morning with the Rajah Rana at the digging up of a Fakeer, who had been buried, as well as I recollect, ten days, and that after his resurrection he was in good health, and when he had refreshed himself with eating and drinking, was quite himself again. The Vukeel also assured me, that there could be no deception, because the man had been buried in the Rajah Rana's presence, and a guard of trusty soldiers had been constantly stationed over the place until he was dug up.

"I also recollect that the commandant of my escort and the surgeon to the political agency were fully impressed with the belief that the facts of the case were as stated by the Vukeel. They obtained their information from the independent source of some of the Sepoys of the escort, who were present at the digging up, and I received several additional particulars from this source, which I cannot now call to mind, except that the Sepoys stated it as a fact that some Fakeers and others had a way of drawing in their breath, and thrusting their tongues back, and clenching their fingers, which enabled them to subsist for a long time without food, and with very little air.

"I believe the man who was buried at Kolah to be the same person who is spoken of in Boileau's Journal, and that he went from one native court to another to get money by a display of his powers.

"My own belief is, that he really did remain without food, and with only so much air as could reach him in his box underground, for a period of ten days or thereabouts."

I feel deeply indebted to Mr. Trevelyan for the above valuable testimony relative to this curious inquiry.

The next case I have to narrate, is, if possible, still more conclusive, inasmuch as the devotee was buried in a common grave, within the military limits, exactly in the same manner as they buried the common soldiers—with this exception, that he had no coffin—in an open space, where the whole transaction was witnessed by thousands of Hindoos, who were anxiously watching to guard their sainted brother against foul play which might be inflicted on him by the Mussulman guards, who were appointed to do duty at his grave, so as to prevent the possibility of intrusion or collusion during the whole period of his interment. There were thus a fair field and no favour for the devotee; abundance of witnesses, and the contending interests and bitter religious antipathy existing between the two parties at work constituting them a *counter* guard, thereby rendering collusion or foul play in the transaction impossible.

The following is the narrative of the facts, as communicated to me by Major ——, a retired officer of the Honourable the East India Company's service This gentleman requested me not to publish his name, least he might incur the displeasure of the Directors, for having taken such a prominent part in a transaction so much beyond the line of his official duties. However, in order to give the

greatest possible authenticity to the facts which he dared venture to do, under the circumstances, after I had written my narrative from the facts which he had communicated to me, he was so kind as to hear the whole read aloud in the presence of several mutual friends, when he pronounced my narrative correct on *every* point, and concluded with the remark, that the case made too deep an impression on his memory ever to be forgotten by him, from the fact of his having been personally so painfully implicated in the transaction.

Whilst staff-officer of a British military station in Concon, in 1828, this gentleman had heard of some of these strange feats of Fakeers burying themselves alive in that neighbourhood, but took no interest in the reports, believing the whole alleged feats as mere hoaxes or tricks. However, the following circumstance occurred, which proved to him the reality of certain individuals being veritably possessed of such extraordinary powers.

One day this officer was waited upon by a Brahmin, who held the public office of Chowdrie. The Chowdrie is a civil functionary who has the superintendence of courts, and all public transactions or feats within his district; but he is subordinate to the staff-officer in regard to all which occurs within what is called the military limits or cantonments, so that, in all which appertains to said localities he is, in the first place, obliged to obtain the sanction of the British officer in command. The Chowdrie told the officer that the object of his visit was to obtain his sanction for one of his sainted countrymen, who had come hither for the purpose of performing one of those feats above referred to,—to bury himself for nine days within the military boundary. He moreover added, that an immense number of people had assembled from the neighbouring country to witness the holy man perform said feat. To this the officer replied, that he did not believe any man was such a fool as to suffer himself to be buried alive for nine days, as, in such a case, he must inevitably perish; and, having said so, he dismissed the Chowdrie abruptly, without complying with his request.

Shortly thereafter, however, the Chowdrie returned, to urge the officer to comply with the request of the Fakeer, assuring him that the holy man was proposing it in good faith, and was most anxious to be permitted to do so within the military limits, as affording better proof that there could be no collusion than if he did so elsewhere; he also added, that he had frequently done so before, and that his sanctity would save him on this as on former occasions. The Chowdrie even went so far as to say, that his sanctity had given him such power with God, that he could remain for any length of time he chose underground with perfect safety. At length the officer replied, "Well, if the man is determined to bury himself you shall have my sanction for him doing so within the military limits; but remember this, that I shall take care that *no tricks shall be played, but that he shall be buried in good earnest*; and, the more certainly to secure this, his grave shall be surrounded the whole time by a guard of Mussulmans, so that no Hindoo shall approach it during his sepulture." With all this the Chowdrie was perfectly satisfied, seeming firm in his faith, that the sanctity of the holy man was quite sufficient to save him during this extraordinary trial.

Hereupon the officer instantly gave instructions to an orderly to send a corporal to see the man fairly buried, and to set a sentry, to be relieved in the usual manner, to keep strict watch over the grave during the whole of the nine days, and to suffer no one even to approach the grave; and, the more certainly to secure this being faithfully accomplished, none but Mussulmans were to be deputed as guards.

In a few hours after these orders had been issued by the said officer, the corporal returned and announced to him, that, after certain proceedings on the part of the saint, and receiving many gifts from the assembled multitude, he laid himself down and passed into a particular condition, after which his followers wrapped his body in a covering called "kumlee," and then laid him in a grave dug in the ordinary way and of the ordinary size, from three to four feet deep, and then turned in the earth upon his body. No coffin was used. On this being done, a Mussulman guard was placed, with orders to walk round the grave, and on no account to suffer any one even to approach it.

Every two hours reports were brought to the officer or his orderly that fresh guards had been set to relieve those on duty, and that all remained as when the earth was thrown over the devotee. So invincible was the hatred of the Mussulman guards against the Hindoos, that they would not suffer any one of them even to approach the grave to get a particle of the sacred earth (a gift inestimable in their opinion) which covered the holy man, whom the Hindoos firmly believed would rise again on the ninth day, as predicted by him.

On the evening of the third day, when other active and important duties had entirely banished from his mind the condition of the buried Fakeer, the officer's attention was drawn to the subject by the person who came to report to him that the sentry had been relieved, and the "dead man all well;" that was to say, remained as at the time he was buried, three days previously. On this announcement being made, the officer, whose faith was less vigorous than that of the Hindoos as to the sanctity of the devotee being able to save him under such circumstances, became alarmed, inasmuch as the feat having taken place with his sanction, within the military limits, and he having set a sentry over his grave, should the man be really dead, as he had no doubt must be the case ere then, he might be brought into trouble and arraigned as accessory to his murder, and lose his commission, with other dire consequences.

The officer, therefore, hurried home, and instantly sent for the Chowdrie, who applied to him for his sanction for the feat to take place within the military boundary, told him his doubts and fears, and urged the instant disinterment of the devotee. The Chowdrie hereupon begged to assure the officer that there was no cause whatever for alarm about the safety of the buried saint, as he had been frequently buried in the same manner, and added, that so great was his sanctity, that he would be perfectly safe, and certain to recover were he to remain in his grave for twelve months or for a hundred years, and he therefore urged upon the officer to allow him to remain in his grave for the full term of nine days, originally stipulated for. Military faith and courage, however, were by no means equal in this instance to that of the Brahmin, and the soldier quailed whilst this enthusiast stood firm, urging the full term of the feat to be exhausted before the exhumation should take place. The officer, however, would not consent to this, but insisted on the instant disinterment of the holy man; and, moreover, by way of self-defence, in case the worst of his fears should be realised, ordered the Chowdrie, in case the devotee was found to be really dead, instantly to have his body carried beyond the military territory.

The more certainly to guard against all further mischance, my friend instantly ordered his horse and rode to the spot, that he might be an eye-witness of all the future proceedings. When he arrived at the place, he found the grave surrounded by an immense crowd of Hindoos, all anxiously waiting to witness the result of this exhumation or resurrection of their sainted brother. The Chowdrie having arrived also, orders were instantly given to remove the earth and drag forth the body of the holy man. To the horror of our military hero, forth it came, wrapped in its camel-hair coverlet, on removing which, he found the body cold and stiff as a mummy. When he had satisfied himself of this by personal examination, both by sight and touch, he felt assured that his fate was sealed, that his commission would be lost, and himself implicated in the murder of this religious enthusiast.

There was yet one hope, although to him apparently a forlorn one, that the Fakeer might be restored by the use of those means of restoration which two of the holy man's followers were about to apply, according to instructions which he had previously given to them. They began by rubbing some preparation over his head, eyes, and eye-brows, and also over the palms of the hands and soles of the feet, and were particularly assiduous of their application of it, and friction over the region of the heart. They had persevered in these attempts for about a quarter of an hour without the slightest apparent impression being made on the subject, and the Christian's hope was now completely extinguished. Not so that of the idolaters of the East. They plied their manipulations with unremitting assiduity, and presently were enabled to open the eyes. Still it was but the glassy look of the eyes of a corpse. By degrees, however, slight motion of the eyes was discernible, which increased until he could slowly move the head; and, after lengthened manipulations and pummelling about his chest, a visible heaving of the chest took place, and still later he was able to articulate a few words, to the unspeakable joy of the Christian master of ceremonies, as well as of the Hindoos and Brahmins assembled on the occasion.

In about an hour the Fakeer had pretty well recovered the use of his faculties, mental as well as physical, and our military hero left the field quite as much gratified to find he had escaped the loss of his commission, and the risk of being arraigned as accessory to the murder of this devotee, as the latter was to remain and receive the numerous presents and mutual congratulations of his admiring and adoring countrymen.

I think the evidence afforded by these narratives proves, beyond doubt, that the individuals referred to possessed the power they represented themselves to have acquired, and performed the feats indicated *bonâ fide;* and that the true physiological explanation is that which I adverted to at the commencement of this paper, namely, that they were self-hypnotists, and that they were in a state of temporary hybernation, or trance, during which, although the lamp of life was burning slowly, still it *was* burning, otherwise death would have been the inevitable result.

We have the analogue to these feats of the Fakeers, not merely in the hybernating animals which periodically pass into the torpid state, and which, consequently, in them, is looked on as a mere matter of course, and not at all to be wondered at; but we have it also occurring spontaneously, occasionally, in the human species, in the disease called catalepsy, or trance. Many cases of trance are upon record, in which the patients remained for considerable periods of time in a state of apparent death, during which preparations were being made for their interment, but who were restored before being buried; whilst there is no doubt of the fact, that, in many others, they had been consigned to their graves whilst yet alive,—for, in some such instances, accidental circumstances have led to the opening of their graves, by which means they were released, and lived for years thereafter. In the latter cases, the feats of these Fakeers have been fully realised in all but the *intention* and *artificial contrivance* of the patients *inducing the condition;* and, in the former, had the subjects been actually interred, and their graves opened in proper time, the like results would have ensued.

Besides the numerous cases of trance already recorded, I have had the history of several others communicated to me, in two of which the patients remained in the horrible condition of hearing various remarks made about their death, and preparations which were making for their interment. All this they heard distinctly, without having the power of giving any indication that they were alive, until some accidental abrupt impression aroused them from their lethargy, and rescued them from their perilous situation. On one of these occasions, what most intensely affected the feelings of the entranced subject, as she afterwards communicated to my informant, was hearing a little sister, who came into the room where she was laid out for dead, exulting in the prospect, in consequence of her death, of getting possession of a necklace of the deceased.

In like manner, in cases of catalepsy, patients have been known to be alive, and still to remain for a great length of time in a state of insensibility and torpor of all the vital functions to an alarming degree, and to subsist for considerable periods of time without food. This was strikingly illustrated in the case of a patient of my late friend, Dr. John Mitchell of this city, of which he furnished me with the following report. The patient was a poor married woman, who was brought into the Manchester Royal Infirmary, and placed under his care. She remained in that Institution in such an intense state of catalepsy, with her jaws locked, that she neither had

meat nor *drink* for FOURTEEN DAYS, after which she became so much relieved, that she could be removed to her home, about seven miles in the country.

During the period this patient remained in the cataleptic state, the only visible signs of vitality were, a *slight* degree of animal heat, and appearance of moisture from her breath when a mirror was held close to her face. Every variety of contrivance and torture was resorted to by various parties who saw her, for the purpose of testing the degree of her insensibility, and for determining whether she might not be an impostor, but without eliciting the slightest indication of activity of *any* of the senses.

A most important fact has since been communicated to me by this patient's friends,—a fact which merits the most serious consideration of all who come in contact with such cases, viz., that whilst she had no voluntary power to give indication, either by word or gesture, that she suffered from the said inflictions, nevertheless she *heard and understood all that was said and proposed to be done, and suffered the most exquisite torture from various tests applied to her!!* A fact so important as this ought to be published in every journal throughout the civilised world; so that in future Professional men might be thereby led to exercise greater discretion and mercy in their modes of applying tests to such patients. It may have been excusable to have done so when unaware that they might thereby be inflicting torture upon a helpless and passive human victim; but, after being made aware of this example to the contrary, they would be altogether inexcusable. (a)

The same discretion ought also to be extended to the modes of testing somnambules. There is no doubt whatever, that in certain stages of that condition, whether occurring spontaneously or induced by artificial contrivance, that some of these patients are perfectly insensible at the time of inflictions the most severe. However, if the means have been sufficiently severe to lacerate, or in any way destroy the tissues, the natural consequences of such inflictions necessarily manifest themselves after the patients are aroused. Thus, in a patient of my own, about whom I was first consulted for an attack of spontaneous somnambulism, besides violent pinching of her flesh and skin, needles and pins were thrust under her nails, and so anxious was her father to determine whether she might not be imposing on them, as had been suggested to him by some kind friend, that he so pinched and bruised the roots of her nails as caused them subsequently to suppurate, and that without her giving the slightest indication of feeling pain at the moment of infliction, or during the sleep. When the poor girl awoke, she wondered what was the matter with her fingers, and what could have made them so painful. This patient was very soon cured of her natural somnambulism, simply by me inducing a similar condition artificially by the mode which I designate *hypnotising*. On one occasion, when I had hypnotised her, I extracted one of her teeth without the slightest indication of her feeling pain, nor was she aware of it after she was awoke, until her father asked her to feel in her mouth. This patient has now been in in the enjoyment of good health for several years, and has never been subject to spontaneous attacks of somnambulism since I first cured her by *hypnotism*.

The phenomena realised by the use of ether and chloroform, in like manner, produce similar states of anæsthesia more or less profound, according to the quantity exhibited and constitution of the patient, and have given a ready credence to phenomena realised by these means which had been by many pronounced cases of rank imposition when induced by mesmeric or hypnotic methods. The peculiar conditions, also, induced by the use of Bangue, Hachisch, and Darvamesc, in the East, all tend to illustrate certain conditions of the nervous system producible by artificial contrivances. Thus, a slight dose of these produces mental hallucination, with some degree of control over the train of thought—a sort of half-waking dream. As the effects advance, the imagination becomes more and more vivid, and a rapid succession of ideas pass through the mind, assuming all the force of present realities. At this stage, as well expressed by Dr. Carpenter, "The internal tempest becomes more and more violent; the torrent of disconnected ideas increases in power, so as completely to arrest the attention, and the mind is gradually withdrawn altogether from the contemplation of external realities, being engrossed by the consciousness of its own internal workings. There is always preserved, however, a much greater amount of self-consciousness than exists in ordinary dreaming,—the condition rather corresponding with that just referred to, in which the sleeper *knows* that he is dreaming. The succession of ideas has at first less of incoherence than in ordinary dreaming, the ideal events not departing so far from possible realities; and the disorder of the mind is at first manifested in errors of sense, in false convictions, or in the predominance of one or more extravagant ideas. These ideas and convictions are generally not altogether of an imaginary character, but are called up by external impressions, which are erroneously interpreted by the perceptive faculties. The error of perception is remarkably shown in regard to time and space; minutes seem hours, hours are prolonged into years, and at last all idea of time seems obliterated, and past and present are confounded together as in ordinary dreaming; and in like manner streets appear of an interminable length, and the people at the other end seem to be at a vast distance; still there is a certain consciousness of the deceptive nature of these illusions, which, if the dose be moderate, is never entirely lost.

The effect of a full dose, however, is at last to produce the complete withdrawal of the mind from any distinct comprehension of external things; the power of the will over the current of thought is in like manner suspended, and the condition of the mind becomes the same in all essential particulars with that of the ordinary dreamer, differing in this, chiefly that the feelings are more strongly expressed, and that they still take their tone almost entirely from external impressions. Thus, says M. Moran, "It will be entirely dependent on the circumstances in which we are placed, the objects which strike the eyes, the words which fall on our ears, whether the most lively sentiments of gaiety or of sadness shall be produced, or passions of the most opposite nature shall be excited, sometimes with extraordinary violence; for irritation shall pass rapidly into rage, dislike to hatred, and the desire of vengeance and the calmest affection to the most transporting passion. Fear becomes terror, courage is developed into rashness which nothing checks, and which seems not to be conscious of danger, and the most unfounded doubt or suspcion becomes a certainty. The mind has a tendency to exaggerate everything. Those who make use of the hachisch of the East profit by all the means which the dissolute manners of the East place at their disposal. It is in the midst of the harem, surrounded by their women, under the charm of music and of lascivious dances, executed by the Almees, that they enjoy the intoxicating Darvamesc; and with the aid of superstition, they find themselves almost transported to the scene of the numberless marvels which the Prophet has collected in his paradise." A still more intense dose, however, reduces the patient to a state of profound narcotism, during which painless operations may be performed, as narrated by Mr. Urquhart in his "Pillars of Hercules," "Travels in Morocco in 1848." He says on this point, "In a very short time he (the patient) becomes so insensible that he seems intoxicated or deprived of life. Then, according as the case may be, the operations are performed, of amputations, &c., and the cause of the malady is removed. Subsequently, the tissues are brought together by sutures, and liniments are employed. After some days the patient is restored to health, without having felt, during the operations, the least pain." Such is our daily experience of the anæsthetic effects of chloroform during surgical operations, and in India the experience of Dr. Esdaile has proved Mesmerism equally potent with the population of the East for like purposes. Indeed it has been proved so in many cases in this country, but I still think that chloroform is the more certain and speedy agent for effecting such purpose in this country. All the above recited phenomena are, in many cases, as genuine and as truly the result of the hypnotic or mesmeric processes, as when induced by the ingestion into the stomach or through the lungs of the medicinal agents referred to; and I believe the great cause of opposition which has been offered to the acceptance of the truth of the genuine phenomena of hypnotism and mesmerism, has arisen from the extravagance of the Mesmerists, who have contended for the reality of clairvoyance in some of their patients seeing through opaque bodies and investing them with gifts and graces of omniscience, omnipresence, mesmeric intuition, and universal knowledge,—pretension alike a mockery of the human understanding, as opposed to all the known laws of physical science.

Arlington House, Oxford-street,
Manchester, May, 1850.

(a) Through the kindness of my excellent and truly worthy friend, the late Rev. Geoffrey Hornby, rector of Bury, in 1845, I was informed, that this patient was still alive, and might be seen by me, if I wished to make personal inquiries regarding her state, beyond what he had kindly obtained for me. This I considered it better to avoid, for the following reason: She had been insane for some time immediately before and after the cataleptic seizure for which she was sent to the Infirmary, and was still in no very bright state of intellect. I therefore thought it just possible, that, were her mind strongly directed to these past painful occurrences, it might be the means of exciting another paroxysm of active insanity, for which I would be certain to get blamed, and, to guard against such risk, I declined calling on her,—a degree of caution which Mr. Hornby highly approved of.

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THE MEDICAL TIMES.

SATURDAY, JUNE 1, 1850.

OUR readers are aware that, in the April Number of the *British and Foreign Medico-Chirurgical Review*, appeared an Article on a subject always interesting to professional men, but never more so than at the present time, viz., the Aspect and Tendency of the many forms of Quackery, *i.e.* of the pretended Methods of Cure with which certain Individuals delude the Public. It is impossible to read this Article without feeling that it is written, not simply by an orthodox Physician, but by a Physician who is a devout believer in the great truths of our Profession, which the experience of more than two thousand years has gradually accumulated. With a just and unswerving rigour the Writer examines the foundations of those fallacious creeds which, under the terms of Homœopathy, Hydropathy, Mesmerism, &c., are the anarchical spirits which now vex the great commonwealth of Medicine, and passes sentence upon the defenders of these doctrines in the name of the Profession he represents.

In executing a task of this kind, to the difficulty of which we alluded in our last Number, it would be supposed that a Journalist might labour with a full conviction, that whatever effect he might produce on the public, from his professional brethren he was certain of sympathy and support. However, in some points, his friends might differ from him,—and differences in matters of detail are inevitable, even among those who profess the same fundamental

opinions,—he might suppose that he would certainly receive that meed of praise which generous men bestow on those who honestly attempt to serve their cause and party. And in this we firmly believe he would be right. We do not think that any Member of our Profession can read the Article alluded to, without crying to the writer a hearty "God-speed!" in his difficult but honourable task.

If this be the case,—and that it is so hardly needs an argument from us, for every man can read and judge for himself,—how comes it to pass that a Contemporary Medical Journal, instead of honestly backing up and supporting the advocate of the Profession, should in the most dishonourable manner pervert the Writer's meaning, separate sentences from their context, and use its utmost efforts to persuade its readers that the man, who is in reality orthodox among the orthodox, is nothing but an Homœopathist in disguise? There is but one answer to such a question. It is a trick of Mr. Wakley's to represent himself to the Profession as its sole champion against quackery, and an attempt to injure those who are now about to become to the Profession, what Mr. Wakley might have been, its faithful representatives and advocates.

The Articles in the *Lancet*, on the Ethics of the *Medical Quarterly*, are so truly weak, that if it were not for their misrepresentations, they would not meet with a moment's consideration from us. Nothing, indeed, would induce us to waste our space in referring to such poor and miserable criticism, were it not for the great evil which results from the dishonest interpretations of the *Lancet*. By them, disunion is created in the Profession; a knowledge of this disunion is spread among the public, and those who are away from the scene of action conclude that there can be no truth where there seems no agreement and no common basis of belief. It is not, however, so much on account of the effect which Mr. Wakley's writings will have on the Profession, that we bestow so much valuable space upon him; but on account of the injury which will result to the Profession if it goes forth uncontradicted, that the Quarterly Journal is a defender of quackery in any shape, particularly in the shape of that absurd and ridiculous fantasy, Homœopathy, which sprang from the distempered fancy of a crazy charlatan.

Such, however, is Mr. Wakley's charge; and he has attempted to prove it in his usual way, by taking portions of passages, distorting the sense, and leaving out of view all the qualifications which the context and the general spirit of the Article demand. But in this case he has overstepped his mark. The Profession have to deal here with no obscure facts, which are known only through Mr. Wakley's agency. The point in question is known in all its bearings; the Article so misrepresented is before us all; all can read it, all can understand it. We need not call the Reviewer into court; he is there already, ready to undergo the examination of his Peers.

Is the writer in the *Medical Quarterly* an Homœopathist? If so, he has assaulted his brethren in the faith in the most unbrotherly way. He "utterly denies the claims of Hahnemann to be considered a philosopher." He points out with great clearness the fallacious and illogical attempts at reasoning of his disciples, and furnishes in a short space arguments against them, which the able author of "Homœopathy Unmasked" might incorporate in the next edition of his excellent work.

On what ground, then, does Mr. Wakley charge a writer who has expressed himself with perfect precision, with adherence to a doctrine he has expressly condemned? We have only been able to discover two reasons, and these are so absurd and foolish, that it seems waste of time to refute them.

The first alleged piece of quackery on the part of the Reviewer, is a recommendation to his Professional brethren to avail themselves of the opportunities which homœopathic treatment may give them, to observe the course and progress of disease when altogether unchecked by remedies. This is so obviously advisable that no one in his senses would object to it. A Medical man cannot himself leave a pleurisy or a pneumonia without treatment; it would not be possible for him to do so; but if a patient were to refuse to be treated by medicines, or, in other words, were to put himself under an homœopathist, the Practitioner is not to allow the opportunity to slip by, without recording the succession of phenomena which occur under such comparatively unusual circumstances. But the Reviewer nowhere counsels the orthodox Medical man to practise homœopathy for the *purpose* of observing the course of such unmedicined cases, although the *Lancet* most falsely asserts that he does so, and pours a quantity of vulgar abuse upon him for opinions which existed only in Mr. Wakley's interpretation.

The other charge brought by the *Lancet* against the Reviewer is this:—It has long been a subject of complaint with the Profession that no distinctive mark has been drawn by the law between licensed and unlicensed Practitioners, or, at least, that no mark has been drawn by which the public can make the distinction. As the law now stands, men call themselves doctors, surgeons, &c., with impunity, although, in reality, they may be bakers and cheesemongers. This is a great evil, and one which we should long ago have had redressed had it been Mr. Wakley's interest honestly to fight the battle, and not to make a sham agitation for his own purposes. It is the feeling, however, of many excellent reasoners, that when this has been done,—when the law has been altered so far that the licensed Practitioner shall be broadly distinguished from the unlicensed,—when the public shall be able to know that such a person has received no Medical education, or, at least, has not carried it to the point of obtaining a license to practise,—many excellent reasoners conceive, we say, that quacks should not be further amenable to law than they are at present. If any one chooses to employ a quack, say they, let him, only let him also be fully aware that the person so employed *is* a quack. Let there be no mistake on this point,—then, if he still chooses to risk his life in the hands of an unlicensed person, the law ought not to prevent him from doing so, and, in fact, could not prevent him if it tried. Others of the Profession, however, hold a different opinion, and think that the law should, with iron hand, hinder a man from putting himself under the care of an unlicensed Practitioner.

We have no desire at present to examine into the merits of either opinion; it is, however, evidently a matter simply of expediency, and a member of the Profession may, surely, think as he likes upon the point. Now the Reviewer holds the first opinion, with this additional stringent proposition, viz., that when a licensed Practitioner adopts a novel mode of treatment, which he practises according to non-professional usages, then that he should be expelled from the ranks of the licensed, and enrolled among those of the unlicensed Practitioners. But the Reviewer deprecates any of that persecution of quacks which some of the Profession desire, and believes that it would not produce the effect contemplated, but rather tend, in the eyes of the public, to give quacks the character of martyrs for their opinions. For holding this opinion, the *Lancet* charges the Reviewer with being an Homœopathist!

Such are the charges brought by Mr. Wakley against the Reviewer,—charges utterly vain, frivolous, and vexatious,—charges brought, not with a view of honestly protecting the Profession against quackery, but with the intention of injuring one who is fast taking away from Mr. Wakley the professional patronage he at one time possessed. But if Mr. Wakley deems that the educated Practitioners of the present day are to be fooled by such puerile devices, he will find himself mistaken. The Profession, he may be assured, have guaged him thoroughly, and recognize in him a kind of pigmy Daniel O'Connell, a man who is always crying "Justice for the Profession," but who stays the advent of justice, that he may wring from his deluded followers the rent on which he fattens.

THE LAST WORDS OF THE *PROVINCIAL JOURNAL.*

If the *Provincial Journal* had not declared it, we should have been quite unconscious of having written a line calculated to excite the acrimonious reproaches of our contemporary. We can assure the Editors of that Journal that we intend no evil towards them; if we did, we could not do them a greater disservice than to publish at length in the *Medical Times* their fretful lucubrations. When the *Provincial Journal* charges us with a desire to appropriate a portion of its subscribers, we confess to the truth of the impeachment; for we do the provincial Surgeons the justice to believe, that very few of them possess so little taste and intelligence as to relish the literary beauties of the leading articles of their professed organ. It may be agreeable to our contemporary to know, that a considerable number of the members of the Provincial Association are already subscribers to our Journal; and we only await the further development of its exclusive and injurious policy, to receive from the Society a still larger number of well-informed and independent men. Whatever "frantic efforts" the Editors of the Journal may make to keep their members, we shall make none to get them, but

shall confine ourselves to a steady, unreserved, and fearless defence of the rights of the Profession at large; and, without caring whether we excite the jealousies of an Editor on our right hand, or the petulant malice of another on our left, we shall explode fallacies and falsities wherever we find them, and commit to public opinion the duty of fixing the responsibility of the offences we condemn.

Some portion of the Article referred to is devoted to the depreciation of a third College, and it is said that "nothing would so effectually widen the distinction between the classes of Medical Practitioners" as the establishment of such an Institution. Supposing this opinion to be just, it could only be revealed in the superior education and qualification of the General Practitioners, who in a few years will outstrip the Physicians and Pure Surgeons in all attainments necessary to a due performance of the varied functions of a Medical Practitioner; and the result would be, either that the fears and interests of the special Colleges would prompt them to merge their antiquated privileges in one grand national Institution, or they would become obsolete. Does our Contemporary anticipate and condemn this issue? It must be so. Physicians cannot be supposed to have a livelier sympathy for the interests of the General Practitioners than these have for themselves; and, inasmuch as the latter gentlemen have unequivocally expressed their desire to be incorporated in an independent College, we think that the Provincial Physicians have committed an unwarrantable intrusion in their endeavour to frustrate that object. They did not consult the General Practitioners when they leagued to be admitted to the privileges of the College of Physicians; why then should the General Practitioners consult them? We do not believe that the Physicians are such disinterested patriots as the Editors of the *Provincial Journal* delight to assert.

We cannot descend to the taste of our contemporary, who, rather than clothe his resentment in the language of cultivated literature, has recourse to coarse epithets. It is said that, in the East, bears have been trained to dance upon a tight rope, and goats to balance themselves upon the point of a sword. Such marvels are not the growth of our soil, and, unless the Editors of the *Provincial Journal* should, by a miracle, be taught to behave with good manners, we despair of seeing similar prodigies in this unromantic region. There is nothing more lamentable or more ludicrous than to see a man show off his incapableness by attempting a feat beyond his powers, and we trust that, for the future, our contemporary will have the modesty to refrain from attempting the hopeless undertaking of demolishing the *Medical Times*.

ROYAL MEDICO-CHIRURGICAL SOCIETY.

We regret exceedingly that the crowded state of our columns prevents us this week alluding to the unequivocal expression of opinion on the abuse of the *Speculum Uteri*, which our recent review of Dr. H. Bennett's Work on Uterine Diseases has elicited from the Royal Medico-Chirurgical Society. Never was there a meeting more largely attended—never one more competent to proclaim a collective opinion. Dr. Robert Lee was enthusiastically greeted, and his Paper, "On the abuse of the *Speculum Uteri*, with Cases of Injury and Death following its Use," a masterly performance. We shall next week devote some space to the anxious consideration of the subject; and, in the mean time, we must content ourselves with saying, that Dr. Lee denounced, in a temperate, firm, and argumentative tone, the employment of the speculum, as at present resorted to by a class of Practitioners, and exposed, by appropriate examples, the iniquities of the practice.

MEMORIAL FROM BRIGHTON.

Owing to a great press of matter, we are unable to insert a Copy of a Memorial in favour of a Charter for the Incorporation of the General Practitioners, signed by twenty-six Surgeons of Brighton. We understand that other Petitions and Memorials in favour of the same object have been forwarded to the Government, and that many more are in course of signature in various parts of the country. This is as it should be.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

May 14, 1850.

Dr. Addison, President, in the chair.

Mr. Richard Phillips, F.R.S., was unanimously elected an honorary Fellow of the Society.

ON EXCISION OF THE OS CALCIS,

IN INCURABLE DISEASES OF THAT BONE, AS A SUBSTITUTE FOR AMPUTATION OF THE FOOT, (WITH A CASE.)

By WILLIAM BOUSFIELD PAGE, Esq., Surgeon to the Cumberland Infirmary.

(Communicated by THOMAS BLIZARD CURLING, Esq., Surgeon to the London Hospital.)

The patient whose case is described in this paper was an unhealthy, ill-nourished, scrofulous boy, sixteen years of age, with disease of the right tarsus, the result of a slight injury he had received several years before. In the beginning of the year 1848, suppuration and ulceration took place; in July, the whole of the back part of the foot was considerably enlarged, and immediately below the inner ankle was an ulcer, from which several sinuous passages proceeded to the bone, through which a probe could be readily passed into two distinct parts of the substance of the carious os calcis. The disease appeared to be altogether confined to that bone; the patient's health was improved by nourishing diet and cod-liver oil; and in October, further examination, confirming the original impression, that the disease was confined to the os calcis, it was deemed desirable that that bone alone should be removed. The patient having been put under the influence of chloroform, Mr. Page made an incision down to the bone in its whole extent, from the lower margin of the ulcer, about half an inch below the inner ankle, directly below the sole of the foot to just below the fibula, which would have enabled him to remove the foot at the ankle-joint, if the disease of the tarsal bones had proved more general than he anticipated. The posterior flap was carefully reflected from the surface of the bone; the insertion of the tendo-Achillis separated, and the joint between the astragalus and calcaneum reached. By the introduction of a small narrow-bladed scalpel he succeeded in dividing the ligamentous structures on either side, and also the inter-osseous ligament. He then made two incisions, one on either side of the foot, commencing at the junction of the os calcis with the os cuboides, and ending at the extremities of the first or transverse incision, dissected this flap from the under surface of the bone, readily separated the connexions of the calcaneum with the cuboid bone, and after a few touches of the scalpel, the former, with scarcely a particle of soft parts attached, was removed. The astragalus and cuboid bones appeared quite healthy. For two or three days he went on quite well, but after that suffered much from acute inflammation of the tarsal joints, which resulted in the formation of an abscess in the dorsal surface of the foot. This was opened, the wound speedily healed, and no recurrence of a like nature took place. Erysipelas and phlebitis being very prevalent at that period in the hospital, this patient did not escape, but in him the disease was confined to the affected limb. In January, 1849, he left the hospital, fourteen weeks after the operation, when he was able to bear considerable pressure on the foot without suffering, but was forbidden to wear a shoe or use his foot for some months. Sixteen months after the operation the foot continued sound; when sitting he is able to extend the foot perfectly. The author concludes with some observations on the desirability of performing this operation in such cases in preference to amputation of the foot.

A CASE OF STRICTURE OF THE RECTUM,

WHEREIN AN ARTIFICIAL ANUS WAS SUCCESSFULLY ESTABLISHED IN THE LEFT LUMBAR REGION; WITH REMARKS.

By CROKER PENNELL, Esq., Licentiate of the Faculty of Medicine of Rio de Janeiro; M.B. Lond., M.R.C.S.E.; formerly Lecturer on Anatomy and Physiology at the Westminster Hospital School of Medicine.

(Communicated by BENJAMIN PHILLIPS, Esq., F.R.S.)

The patient whose case is described in this communication was a gentleman about 50 years of age, who had been operated on for fistula in ano, and about five years ago he discovered that he had a stricture of the rectum, which was several times freely divided by the knife, but only with temporary benefit. Two years ago, when he first came under Mr. Pennell's care, he was suffering more than he ever had before, the stricture, being very narrow, with difficulty admitting the point of the finger, the gut feeling as hard as cartilage. At last, in consequence of violent and repeated straining at stool, the bowel ulcerated, and the fæces formed a false passage into the urethra and bladder. From this time nearly all the fæces passed through the penis, there being also a very narrow stricture in the urethra, no surgeon having been able to introduce an instrument into the bladder for eighteen years. His sufferings now became much aggravated; the urethra became inflamed, in consequence of the acrid fæces passing through it; and sometimes particles of undigested food blocking up that passage; the testicles inflamed, and partially suppurated. The patient's sufferings at last became so intense, and his health so rapidly gave way, that on November 4, 1849, Mr. Pennell determined to perform an operation for his relief. The patient being fully under the influence of chloroform, he commenced by an incision beginning immediately underneath the twelfth rib, on the left side, and continued down to the crista ilii. This incision corresponded to the outer margin of the quadratus lumborum muscle, and by it were divided the skin, fat, and superficial fascia. By a few strokes of the knife were next divided a fascia and some scattered muscular fibres belonging to the transversalis and oblique abdominal muscles. A dense fascia now presented itself, upon dividing which the outer edge of the quadratus lumborum was clearly seen. Another and another exceedingly dense fascia (the transversalis) was then carefully opened, and divided upon a director, upwards and downwards, to the full extent of the external incision. Some loose cellular tissue, forming the anterior layer of the transversalis fascia, having been next cut through without a director, a large quantity of fat was exposed. This having been very carefully removed, layer after layer, the posterior surface of the intestine was at length reached. Having satisfied himself that it was really intestine, Mr. Pennell carefully opened it with a scalpel and forceps, to the extent of at least an inch and a half. Four sutures were applied to the margin of the opened gut, to secure them to the skin,—one at the upper extremity of the incision, one below, and one at each side; so that the bowel was made to gape, and a spectator (without touching the patient) could easily see the interior of it. The gut united in its new position by the first intention, to the parts with which it had recently been brought in contact. Within three days after the operation the hectic fever ceased. In seven weeks the patient's appearance was very much improved, he having acquired a considerable increase in flesh. He was entirely relieved of his sufferings, and walked about with ease. For the first three or four days the urine passed entirely through the anus; it then began to come through the urethra, mixed with a large quantity of

pus; at times it passed up the bowel, and escaped at the wound. The author dwells much on the value of this operation in similar cases of obstruction, on its comparative facility of performance, and on it being so much less hazardous than opening the bowel in the iliac region through the peritoneum. To M. Amussat he gives the credit of establishing, beyond doubt, its claims as a regular operation of surgery. He believes that the dangers of the operation have been very much exaggerated, and concludes by observing: "I would have recourse to it in every case of stricture of the rectum (not curable by the use of bougies) which produced severe suffering to the patient, prevented him following the ordinary avocations of life, or which was beginning to destroy the health or undermine the constitution."

Mr. Cooper was unwilling that this paper should go forth to the Profession from this Society without comment. He objected to the facility with which it was stated this operation could be performed. He also commented on the concluding remarks respecting the performance of the operation on the right side of the body, from which he gathered that Mr. Pennell conceived it would be more difficult on the right than on the left side. It is, on the contrary, an operation which can be performed much more easily on the ascending, than on any part of the descending colon, and is especially difficult with respect to the sigmoid flexure. He (Mr. Cooper) had great doubt whether it were not as easy to open the gut in the iliac fossa, as in the lumbar region, if the disease be in the part of the intestine below the sigmoid flexure. If the disease for which this operation is to be performed, be of a malignant character, there might almost be a question as to its propriety. It might be said it would give some ease, would disarm the agonies of death, and thus a reason might be afforded for its performance, but in that case the patient should be made aware, that it is only a palliative proceeding, and intended merely to give temporary relief. The operation on the sigmoid flexure, should only be done under the most favourable circumstances. Mr. Hilton had operated on the right side on two occasions.

Dr. Addison mentioned the case of a man about 45 years of age, whom he had seen lately while labouring under insuperable constipation. He was troubled with eructations of flatus, but there was not any vomiting. From the shape of the abdomen and of the coils of the intestines, he was led to believe that the obstruction existed about the commencement of the cæcum. The patient was in great distress; large quantities of every kind of purgatives had been given, but ineffectually. He ordered him five grains of ex. coloc. c. with one grain of calomel every hour. He took ten of these pills, and then his medical attendant, finding him suffering greatly, and hardly knowing what to do, gave large doses of morphia, which afforded relief for the time. He was called to him in the night, being told the patient was apparently dying. The morphia was repeated in considerable doses, and after a time the patient obtained relief, for the bowels began to act, and then fæcal matter passed away. Dr. Addison did not know what became of the patient afterwards, as he had lost sight of him since.

Mr. Cooper commented on the annoyances and inconveniences attending the formation of an artificial anus, which, he stated, were the reason the operation was always delayed to the last moment; and the case just described was a proof that, even at the last moment, relief might be afforded. He had often noticed the action of opium on the bowels under such circumstances. A tradesman in Norwich, in 1809, laboured under insuperable constipation, and every purgative tried had failed to act. At last Dr. Alderson ordered him a good dose of opium, which gave great relief; the bowels acted, and the patient got well. This case made a great impression on his (Mr. Cooper's) mind. In Dr. Addison's case, he was of opinion that the obstruction was located in the larger rather than in the small intestines, because of the non-occurrence of vomiting, which is not met with in obstructions of the large intestines until very late in the disease.

Mr. Phillips thought if Mr. Cooper had heard the case throughout, he would not have expressed the opinion he had done. If ever there was a case justifying the operation, this was one. Everything had been tried to overcome the obstruction; the exact seat of the stricture was known, and no fæcal matter could pass through it. The bowel had ulcerated above, and its contents were passing away through the bladder and urethra, rendering the patient's life most wretched. He apprehended that, if ever a case demanded an operation of the kind, this was the case for it.

Mr. Cooper had not intended to find fault with this particular operation, but he did not wish it should go forth to the Profession that it was to be performed with such facility. He admitted that this was a case especially requiring the performance of the operation.

Mr. Macilwain alluded to the use of purgatives in treating obstruction, and expressed his wish that the Society should suspend its opinion until the subject could be fully discussed, which he had reason to believe would occur shortly. He then narrated a case of obstruction in the bowels, in which, after other remedies had failed, small doses of opium succeeded in effecting a cure. He added, however, that as he should be guarded in giving purgatives, so also would he be in the use of opium.

Dr. Black highly commended the conduct and skill displayed in the management of this case. It did Mr. Pennell very great credit.

Mr. Hodgson could not allow it to go forth that this operation was one of great danger. He had seen it done several times in the left lumbar region, and in no case was there any difficulty. There is scarcely an operation in surgery which can be made the subject of more defined rules than this. He differed in opinion with Mr. Cooper, respecting the operation on the right side; he believed there were only two cases in which it was recorded to have been done successfully. One of these occurred at Geneva, and the other in the practice of Mr. Clements, of Shrewsbury.

Mr. Cooper remarked, that he had not spoken of the success but of the facility of the operation.

Mr. Hodgson continued: The operation in the iliac fossa, which Mr. Cooper mentioned, had rarely been successful. It could not be done without opening the peritoneum. On the left side, the intestine is behind the peritoneum, which need not be opened in this operation; on the right side, it is more nearly surrounded by that membrane, and it is almost impossible to open the sigmoid flexure without incising the peritoneum. He (Mr. Hodgson) thought this operation was one of the greatest modern improvements in surgery. He had seen persons on whom it had been performed, a long time after they had undergone it, and they did not appear to be so miserable as Mr. Cooper imagined.

Mr. Cooper observed, that in his remarks on the difficulty attending the operation, he had alluded to opening the sigmoid flexure. There was not any difference between the ascending and descending colon as regarded their peritoneal covering.

Mr. Hodgson wished to correct a trifling error in the paper; it stated that, in Mr. Tuke's operation, the peritoneum had been opened, and the intestine incised afterwards. Now he (Mr. Hodgson) was present at the operation, and he was sure that this was a mistake. The peritoneum had not been opened at all.

Mr. Macilwain differed in opinion with Mr. Hodgson. So far was he from regarding this as one of the greatest improvements in surgery, that he doubted whether it were an improvement at all.

Mr. Arnott quite coincided in the opinion Mr. Hodgson had expressed. There was a class of cases in which this operation alone afforded a chance of relief. When there exists an insuperable obstruction in the rectum, or in the sigmoid flexure, and the patient is in extreme circumstances, this operation is the only thing that can be done.

WESTMINSTER MEDICAL SOCIETY.

April 20, 1850.

Dr. Murphy, President, in the Chair.

DISEASED HEART.

Mr. Marson exhibited a specimen of diseased heart taken a week before, from the body of a man deceased in the Small-pox Hospital, while labouring under confluent small-pox. The man was forty-one years of age, tall, and well-proportioned, though not stout; a porter by employment. About ten weeks previously he received a blow over the pit of the stomach from the pole of a van, which caused him great pain, although he did not fall. In the course of two hours he suffered from palpitation of the heart, who continued more or less till his decease. He had never suffered from rheumatism, nor, indeed, from any other disease, except ague in his nineteenth year, and an occasional pain in his face, which was sometimes attributed to tic douleur-oux, and at others to a bad tooth. He was treated for the palpitations at the Western Dispensary, and was for three weeks an in-patient at St. George's. Getting a little better, he returned to his employment, and was for a short time engaged as a light porter, but being attacked by confluent small-pox, he was admitted into the hospital. He was unable to lie down, on account of the palpitations of the heart, and the pulse was very irregular, no three beats being alike. As well as could be ascertained, the beats were 120 in the minute. The heart, when examined by the hand and stethoscope, was found beating with great violence, very irregularly, and could be felt and heard all over the chest. The morbid sounds were not very clear, with the exception of regurgitation after the first impulse. He died at midnight of the fourth day of the small-pox invasion. At the *post-mortem* examination the heart was found greatly enlarged; it weighed 21 ounces without the pericardium, the weight of the healthy heart at the age of forty being, according to Dr. Clendinning 9½ ounces, according to Dr. Reid 10½, so that this heart weighed twice as much as the healthy organ. There were not any adhesions between the heart and pericardium, and no more fluid in the latter than is usual. The aorta was healthy, excepting a little redness at its commencement. The right auriculo-ventricular opening was large; both ventricles contained polypous concretions, entangled in the carneæ columnæ; there was a cartilaginous deposit at the base of the mitral valve; the tricuspid was nearly healthy. Only two aortic valves, instead of three, could be discovered, and this Mr. Marson was inclined to regard as an original malformation. They were thickened, and cartilaginous at the edges. The pulmonary valves were healthy. The lungs were gorged with blood. The liver healthy. Kidneys not examined.

Dr. Lankester considered the case of interest, with respect to the relation between the condition of the heart and the blow. The effects produced by external blows on internal organs, was a subject which had not been well made out. It appears to be the result of a revulsive action. This, at first sight, appears to have been the case in this instance, but, from the size of the heart, it would be almost presumptuous to suppose such an extent of disease had been caused by a blow received only ten weeks before. Still, however, from the account of the case, it might be so, the patient not having presented previously any indications of diseased heart, which showed themselves soon after the blow had been received, and continued till death. There was another point of importance respecting the heart. In taking the measure and weight of the heart, no notice is usually taken of the height of the individual. Yet it has been shown that there is a great difference in the form and weight of the lungs in persons of great height and in those who are short. It is fair, therefore, to presume, that there is the same difference with respect to the heart. In this individual, then, he having been six feet four inches high, we should be prepared for a considerable increase in the size and weight of the heart. There could be no doubt it was diseased, but, at the same time, although it weighed twice as much as an ordinary heart, it did not follow that it was enlarged to double that extent, as it might have been originally a large one.

Dr. Manson, after briefly referring to a case in which a man who had received a severe blow in the back from the buffer of a steam-engine, was found after death to have had fatty degeneration of the kidney, suggested that probably, in this case, the blow on the abdomen had caused disease of the kidney, the urea thrown back into the system causing the disease of the heart.

Dr. Snow remarked that the affection of the heart, caused by urea, was hypertrophy of the left ventricle. In Mr. Marson's case the enlargement was general over the heart, and it was not at all the kind of disease caused by the retention of urea.

Dr. Routh called the attention of the meeting to the enlargement of the heart exhibited, which was not restricted to the left cavity, where valvular disease co-existed, but also extended to the right cavities, to account for which there was no corresponding disease of the valves or of the lungs present. Was not this enlargement rather engorgement than hypertrophy? He (Dr. Routh) had paid great attention to the former lesion, having often recognized it during life. He had published some cases of it; others had also been recorded by Drs. Taylor and Piorry. During life the disease was frequently observed after attacks of endocarditis or pericarditis; sometimes coming on rapidly, in the course of a few hours, sometimes taking as much as a couple of days for its development, and then as gradually disappearing. The diagnosis of cardiac engorgement during life was not always very easy, except in extreme cases. The enlargement was chiefly transverse, extending sometimes as much as five inches; not upwards, as in pericarditic effusion, nor downwards, as in hypertrophy. The sounds were also less loud, with more or less cardiac oppression. Moreover, the history of the case usually assisted the diagnosis. He had never had an opportunity of examining an engorged heart after death by the microscope; but he should expect to find a large number of tortuous vessels. He believed that many hearts in which no valvular disease existed, and which were said to be hypertrophied, were merely engorged. This engorgement could be induced by rapid running, the increased cardiac action being, in those cases, more generally restricted to the aorta and larger vessels in the neighbourhood of the heart. He could conceive a case of death after rapid running occurring, in which engorgement would be the only lesion found after death.

Dr. Manson read a paper, entitled

OBSERVATIONS ON SOME REMARKABLE CASES OF HYSTERIA,

in which, after referring to the more extended signification given to the term at present than formerly (Good only noticing the hysteric paroxysm) he proceeded to give a short review of the subject, taking as the basis of comparison, the four cardinal principles of Dr. Laycock, from their embracing the points chiefly controverted, and (whether true or false) being clear, concise, and positive. Dr. Laycock's first principle, "That the nervous system is the seat of hysteric diseases;" is concurred in at the present day; it was formerly referred to the uterus, whence the title hysteria, from ὑστέρα, the womb; this title not being so objectionable if the sexual organs be viewed rather as accessories than actors, as instigators than agents, as observed by Dr. Watson. What, then, is the condition of the nervous system? Is there congestion or anæmia? Highmore attributes hysteria to congestion of the heart and lungs, while Stahl throws similar discredit on the vena porta. Dr. Marshall Hall's beautiful theory assigns all paroxysmal disease to congestion of the nervous centres, and traces it to an interrupted state of the venous circulation, termed "phlebismus," and dependent on spasmodic contraction of the platysma myoides or other muscles, which he designates "trachelismus;" which is itself caused by emotion or exerted reflex action. Cerebral congestion, due to heart or lung disease, is not usually attended by convulsions; this affords an argument against this theory, but at the same time the fact of one being sudden and the other gradual, may be urged in explanation, and the direct result of strangulation, as attended successively by apoplexy, epilepsy, and asphyxia. But admitting the sufficiency of sudden congestion to produce convulsions, it may be enquired how far such spasm, or "trachelismus" is capable of inducing such sudden congestion; and, whether the tendency of trachelismus itself, does not prove, that, prior to congestion, there exists great susceptibility to spastic action, and, therefore, that the convulsive act or paroxysmal affection, may be altogether independent of congestion. With respect to anæmia, we have sufficient evidence, that rapid loss of blood will cause convulsions, as seen in the slaughtering of sheep by cutting across the main arteries of the neck, or following profuse uterine hæmorrhage. More especially Sir Astley Cooper's experiment, where, after tying the carotids, he made pressure on the vertebrals and convulsions followed, the animal recovering on the removal of the pressure; the same results followed five repetitions of the experiment. Dr. Todd considers that anæmia may induce epilepsy, although not itself the cause; while it is improbable that congestion *per se* could do. It must be remembered, however, that in all the above cases the anæmia was sudden; the result of rapid depletion, or the instantaneous withdrawal of the current of supply. It is an interesting question, whether, under either of these conditions, the state of the circulation in the brain is not the same? Dr. Kellie's experiments seem to support this view: for the hydraulic principle of the circulation within the cranium prevents the actual amount of blood from varying in quantity, although the balance of the circulation within the cranium may be destroyed, or even pressure exerted on the soft nervous pulp by variations in the impetus of the arterial current. When, however, the arterial current is suddenly cut off, or the venous current suspended, the cerebral circulation is equally brought to a stand, and whatever the balance between the two may be, such it must remain, the entrance and exit of the blood being interdependent. In death by strangulation, and in that by sudden depletion, the circulation in the brain will be found the same, as proved by Dr. Kellie's cases of depletion and cases of death by hanging, observed by him and confirmed by Dr. Watson's observations. If, then, the state of the cerebral circulation be the same in both, is it remarkable that the result should be the same, *i.e.*, convulsions. In what part of the nervous system is hysteria particularly located? The brain, spinal cord, and sympathetic system, have each found defenders, and even particular portions of the latter, as the uterus and stomach. More enlightened views have placed it in the nervous system at large, as explaining otherwise anomalous symptoms. Dr. Todd considers innutrition of the nervous system a predisposing cause, rendering it more susceptible to moral and physical causes. Supremacy of emotion over the will being the chief characteristic, Dr. Watson remarks, a stern nurse or cold affusion will keep it, however, much in check. Dr. Laycock's second principle, "That hysteria is peculiar to females." This is not the general opinion. Cases of hysteria in males from Thompson, Ferrear, Watson; remarkable case in King's College Hospital, 1845. Dr. Laycock admits the fact, but considers them as exceptions to a general rule. Dr. Laycock's third principle, "That women of susceptible nervous system are more liable than others." This susceptibility, he says, exists in all recorded cases. Aretæus and Hippocrates refer to this excitability, or "mens vaga." Watson speaks of it. Sir B. Brodie attributes it to imperfect development of the nervous system. Dr. T. Thompson thinks it may be congenital, and derived from gouty, epileptic, or sickly parents. Dr. Todd concurs in thinking it hereditary, and that the gouty or rheumatic diathesis is frequently associated with the hysterical. Drs. Watson and Thompson think it may be generated by early education, physical indulgence, and sentimental reading. Does not this very susceptibility constitute the disease itself? Those not possessing it are not liable to hysteria; but, if necessary to its existence, it must be a part of its nature. This is, doubtless, Dr. Todd's meaning, when he says, "Hysterical people are the creatures of impulse. Emotion is exaggerated." Is not hysteria, simply, this emotion or susceptibility, manifested externally? Dr. Laycock's fourth principle, "That hysteric diseases appear only during that period of life in which the reproductive organs perform their functions." This generally admitted; as also Dr. Laycock's views respecting the influence of the ovary: the restriction of hysteria to the menstrual reign is a strong argument in its favour. Salacity is intimately connected with hysteria. Remarks of Drs. Good, Watson, and Todd. The latter observes: "Chorea takes place *before*, hysteria *after*, the catamenial flow: hysteria dependent on derangement of ovary, the discharges being pent up; less common in men, because less chaste." In the lower animals, crests, party-coloured feathers, tusks, manes, and other epidermic appendages, together with sexual odours, are the means of exciting the function of reproduction; these are, in great measure, replaced, in rational beings, by the emotional and imaginative faculties; odours and epidermic appendages being rudimentary. At puberty, when the reproductive organs are developed, these faculties are unfolded, and peculiarly distinguish youth. Now, if, either from congenital tendency, misguided education, or impaired nutrition, the emotional and imaginative faculties obtain supremacy over volition, we shall have hysteria. Hysterical paroxysm resembles epilepsy, and is chiefly distinguished by there being no loss of consciousness as in epilepsy; the movements are combined and convulsive, and there is a writhing of the body. Hysterical affections may be classified as neuralgic, paralytic, and spasmodic. Of the neuralgic: irritable breast; painful joints; clavus hystericus, its analogy to browague; pleurodynia, its connexion with leucorrhœa; tenderness of spine and of epigastric and hypochondriac regions; case of John Bruce. Neuralgia of finger, &c., case of Lydia Payne. Of the paralytic: paralysis of one or both extremities, of face, of larynx, of pharynx, of bowels, (tympanitis,) of bladder, recovery of bed-ridden females under strong impressions. Mrs. W.'s case, paralysis of arm. Of the spasmodic; rigid contraction of limbs and joints. Eructations, vomiting, hiccough, cough, sneezing, sighing, sobbing. Augusta Howe's case; paroxysmal sobbing, dyspnœa, induced at pleasure by pressure on the epigastrium. Miss H.'s case; paroxysmal spasmodic cough, waking her out of sound sleep, epigastric tenderness, languid circulation, leucorrhœa, great tolerance of chloroform. Ann Eliza Lowe, case of; had a fit of hysteria following fright; succeeded by loss of speech and involuntary spasmodic twitchings and movements of left arm and leg. From the preceding review, it seems just to conclude, that hysteria is due to the emotions attaining supremacy over the will, induced by an excited and ungratified sexual organism acting upon a weak and sensitive nervous system. Thus Sauvages remarks, "Salacitas major, major ad hysteriam proclivitas."

Dr. Murphy remarked, that it was an important question how far this disease was connected with congestion of the generative organs. It frequently depended on masturbation in the males, and on congestion of the ovaries in the female. He (Dr. Murphy) had seen cases in which the body of the uterus was inflamed, and not the cervix, in which hysteria existed; in other cases again, where the cervix uteri was the seat of inflammation, and not the body, local symptoms only existed. It was an important point to investigate. He believed that congestion of these organs so excites the ganglionic system, as to cause hysteria.

Mr. White inquired of Dr. Manson the strength of the chloroform used in one of his cases, and the quantity inhaled.

Dr. Manson replied that the quantity, three ounces, was inhaled in the course of three hours; an ordinary inhaler was used. The chloroform was of the usual strength; two ounces were employed for several days, and the dose was increased by a drachm at a time.

Mr. Cox mentioned the case of a married female, 32 years of age, whom he attended in the country two or three years ago, and which case he considered to resemble in some respects one mentioned by Dr. Manson. Her sexual health was very much deranged, and she suffered from hysteria, when all of a sudden she had a very singular cough; it occurred in paroxysms lasting five or six hours, every expiration being marked by coughing, and went on, till each paroxysm continued for twenty-four hours, depriving his patient of sleep, and deranging her health to such a degree, that her life was despaired of. Every antispasmodic that could be thought of, was tried unavailingly; but it at last yielded to an emetic given at the commencement of the paroxysm, and after that large doses of the tincture of castor, three or four drachms being exhibited at a time, care being taken to occupy the mind, and prevent any brooding on the complaint.

Mr. Chippendale observed, that Dr. Manson, in alluding to the spasmodic varieties of the disease, had only mentioned the clonic, and not the tonic spasm, cases of which, nevertheless, every member of the Society must have met with. In illustration of his view, Mr. Chippendale then spoke of a case of tonic spasm of the adductors of the thigh, which ultimately yielded to antispasmodics. He recollected a case which occurred about fifteen or sixteen years ago, and was supposed to be neuralgic, but which he believed, from the history of the case, was hysterical. A young woman suffered from a most violent pain of the leg, for which every thing was tried, but uselessly, and at last the surgeon had recourse to amputation. The pain recurred higher up, and amputation was again performed above the knee; as the pain still returned, another slice was taken off. After that, the anterior crural nerve was divided; and, after that operation had failed to relieve her, about an inch of the great sciatic nerve

was cut out Finally, amputation at the hip-joint was performed. The patient is now, he believed, fully recovered. The justification for these different operations was alleged to be a case which was formerly treated at Guy's Hospital, where similar suffering was experienced in the arm; several operations were practised, and finally amputation at the shoulder-joint. He (Mr. Chippendale) believed it was not a case of neuralgia, because it is not common in that disease for the pain to declare itself higher up, after the apparent seat of the disease has been removed. His object in bringing these cases forwards was, to put gentlemen on their guard against having recourse to operations too readily.

In such cases, having, as he believed, hysteria for their origin, constitutional treatment was more likely to be of service.

Dr. W. Merriman was not quite certain whether he referred to the same case as Mr. Chippendale; but, if so, the woman recovered in consequence of bearing a child.

Dr. Lankester objected to the term "hysteria," as the disease is not necessarily connected with the generative organs. He then referred to the occurrence of the disease in men, and said, there are very few practitioners who have not met with a disease presenting all those symptoms in the male, which, if they had occurred in the female, would have been called hysteria, or, as Dr. Laycock terms it, neuremia. He (Dr. Lankester) thought it, however, not of so much importance to ascertain the propriety of names as to distinguish correctly between functional disorder and structural derangement. He had seen pleurodynia treated for pleuritis, and hysterical pain in the abdomen mistaken for peritonitis.

Dr. Snow had met with cases of hysteria in which sensation was really absent. The cornea could be touched without causing winking. In these cases, respiration was very slow. Respiration is very apt to be affected in hysteria: it is often very rapid,—as rapid as the pulse. He (Dr. Snow) believed it would ultimately be found that that peculiar state of the nervous system, called hysteria, depended on some morbid state of the blood—some poison in that fluid. The urine is greatly increased in quantity, and is often little more than water, the salts that should pass off in it, being retained. Hysteria he thought, therefore, was a kind of toxemia, and he was confirmed in this opinion by the fact, that many of the narcotics will bring it on. The habit of taking alcohol freely, will render many persons hysterical. He did not approve of chloroform as a remedy for daily use in hysteria; he could hardly believe, in the case mentioned by Dr. Manson, that three ounces had been inhaled. From the construction of some inhalers, a large portion of the chloroform is lost during the process of inhalation, and that might have been the case in that instance. It could not all have been drawn into the lungs; as much as two-thirds of the chloroform used may be lost with some instruments.

Mr. Clarke remarked that no fact is so clear as that hysteria is in some way connected with the reproductive organs.

Dr. Manson, in reply, stated that Mr. Cox's case was very interesting. He had tried tartar emetic on his own patient, and had found that it checked the cough, and could stop it in a quarter of an hour, while under all other treatment it lasted half an hour, and even three hours under chloroform. He employed it to produce an altered condition in the stomach and diaphragm, and thus oppose the morbid action of the respiratory muscles. He had intended to allude to the tonic spasm of hysteria, but time would not allow of his doing so. He thought Dr. Snow's explanation respecting the chloroform might be correct, and that a large portion of that supposed to have been used, had been lost.

ARSENIOUS ACID AND ALBUMEN.—Mr. Edwards recently read a paper, at the Chemical Society, on the action of arsenious acid on albumen; in which he showed that the whole of the acid in the coagulum formed by the mixture of albumen with arsenious acid, may be removed by careful washing, assisted by the disintegration of the coagulum by trituration, and, further, that the coagulum itself is not poisonous to animals. Hence he concludes that the retention of the arsenious acid by albumen is merely mechanical.

CORRESPONDENCE.

LETTER FROM PROFESSOR SIMPSON.

[To the Editor of the Medical Times.]

SIR,—To-day I have seen, for the first time, an Article in your Journal of May 11, from the pen of your Paris Correspondent, and referring to a visit which I lately made to the French capital.

The Article in question contains, within a brief space, an unusual number of incorrect statements. But I take up my pen principally and anxiously to correct one. Your Correspondent chooses to make me answer, in very rude terms, some observations made by my kind and esteemed friend Dr. Brewster, at a meeting of the Paris Medical Society. His statement of Dr. Brewster's observations is inaccurate; and still more so is my reply. In the course of conversation I happened to mention the remark which a distinguished London Medical critic made in reference to the probable anæsthetic birth of the London accoucheur who first published the foolish objection, that the use of chloroform in labour might induse idiocy in the child. This remark your Correspondent has improperly thought fit to make me apply to Dr. Brewster, a gentleman for whose true excellence of heart and head I entertain the most sincere respect, and who, by his high character and talents, has very greatly elevated in Paris that department of practice over which he presides.

Let me simply add, that assuredly I did not (as your Correspondent, among other things, avers) visit Paris because "the tide of opinion abroad was setting strongly against chloroform." I knew quite the reverse to be the fact. And I can truly say that I was equally surprised and gratified to find how extensively chloroform was already employed in the various French, German, Dutch, and Belgian Medical schools which I had an opportunity of visiting. I believe it will be difficult or impossible to name any one new treatment or remedy that ever before made such rapid and general progress into practice as chloroform has done in the course of the two short years and a half that have elapsed since its first introduction.

Yours, &c.,
Edinburgh, May 23, 1850. J. Y. SIMPSON.

AMERICAN CHEESE.

[To the Editor of the Medical Times.]

SIR,—A whole family of six, whom I accidentally saw about six weeks since, who had partaken of American cheese, were attacked with symptoms resembling cholera. I felt induced to mention the circumstance to another Practitioner in this town, and he informed me that he had had similar cases, and that he had been informed by another Practitioner, that cases bearing all the character of cholera had been seen by him, the subject of which had also partaken of American cheese. Not having seen any allusion made in reference to the subject, but noticing instances of death attributed to cholera, I feel induced to trouble you with this communication, as I feel it quite possible to confound the symptoms proceeding from the apparent effects of American cheese with those of cholera.

I beg to remain, Sir, your obedient servant,
ED. STEDDY.

Chatham, May 28th, 1850.

LETTER FROM DR. TILT.

[To the Editor of the Medical Times.]

SIR,—I have informed Dr. Doherty of Queen's College, Galway, that I should request you, to permit me, through the medium of your Journal, to rectify a mistake which I have unintentionally made when alluding to his practice in my work on "Diseases of Menstruation." At page 132 of that work, I say, "It appears, that in the Dublin Lying-in Hospital, frictions with iodine ointment are made internally to the roof of the vagina, in those cases which Dr. Kennedy used to call secondary ovaritis. We think the practice dangerous for *certain* reasons too evident to require enumeration, &c., &c.;" but, on referring to Dr. Doherty's paper on Chronic Inflammation of the Broad Ligaments, I find that neither Dr. Doherty nor Dr. Kennedy has recommended *frictions* with iodine ointment, but its "application" to the roof of the vagina.

I regret that I was not informed of my inaccuracy, when I first published it in the *Lancet*, (April, 1849,) as this would have prevented its repetition in my work, and I lose no time in removing any wrong impressions to which I may have given rise respecting the practice of gentlemen, as much distinguished by their honourable character as by the value of their valuable contributions to medical literature.

I remain, Sir, obediently yours,
E. F. TILT.

8, York-street, Portman-square, May 27, 1850.

MEDICAL ETHICS.

[To the Editor of the Medical Times.]

SIR,—The thinking members of the Profession must feel obliged to you for advocating the adoption of a more dignified and rational method of attacking quacks and quackery. I see that the *Lancet* advises the Profession to run a-muck at Homœopathists, Mesmerists, and the rest, and abuses a Writer in the *Medico-Chirurgical Review* for recommending a quieter and surer method. A certain homœopathic doctor opened the campaign here in York about two years ago, and soon attracted the attention of the Profession to his ridiculous proceedings, by letting his patients die of peritonitis, apoplexy, &c. One case was so glaring, that a barrister of the Northern Circuit, a friend of the victim, was very anxious to have had a legal investigation instituted; but, upon inquiry, it was found that a good case could not be made out, and the attempt was therefore abandoned, on the ground that unless a verdict of manslaughter resulted, with imprisonment of the offender, his popularity and power of inflicting injury would only be increased. The Profession in York also discussed the matter, and considered it to be by far the wisest course to let him alone. The result has proved the wisdom of their decision, for at last the Homœopath prudently decamped, although warmly supported by the superstitious part of the people. It is generally considered here, that an Homœopath is naturally only an annual or biennial, exhausting the soil in about two years; and that the more crafty try to get themselves well abused by the Profession; that being, in fact, a capital advertisement, and enabling them to hold their ground better. The vagaries of the *Lancet*, it is feared, will be used by them to good effect.

A YORK PRACTITIONER.

May 25, 1850.

STATEMENTS OF THE COLLEGE OF SURGEONS.

[To the Editor of the Medical Times.]

SIR,—As the writings of the Council of the Royal College of Surgeons of England are at times incomprehensible to the capacities of some of their country members, we must on such occasions apply to you, and we now do so, for an elucidation of a part of their reply to Sir George Grey, Bart.

1850, March 2nd. The Council "had no hesitation in adding, as *the result of their long experience*," (before 1839?) that "the infallible consequence of raising unduly the standard of education would be," (had been?) "practically, the evasion of any qualification."

1850, May 3rd. The Lord Advocate (as reported in the *Times*) talked about "greater refinement of knowledge," and "being elaborately educated," as likely to prevent Medical men from residing in small towns and villages.

If either party had named the time when such consequences were manifested, we might have been influenced by the *result* of the experience; "but, until we have a *proof*, they cannot expect us to be guided by their unsupported allegations.

If the Council of the College act practically in their Profession, upon such presumed experience as that to which they have alluded in their answer to Sir George Grey, we cannot consider *their experience* to be very valuable. At any rate, our counter-allegation, that "the higher the degree to which a Surgeon is educated, the more likely will he be to undertake responsible duties alone," is of equal value with that of the Council of the College of Surgeons.

If the most inefficient Surgeons live in small towns and villages, how have the Government "cared for the poor" in the Unions?

I am, Sir, yours respectfully,
A SURGEON IN A SMALL TOWN.

May 18, 1850.

DR. TODD'S LECTURES.

[To the Editor of the Medical Times.]

SIR,—There is one part of Dr. Todd's interesting lecture in your last Number, (see p. 380,) which appears to require some elucidation. For instance, he says, "my mind may be occupied with some en-

grossing subject at the time the rose is presented to the organ of smell; the physical phenomena will, nevertheless, take place; odoriferous particles will impinge upon the olfactory nerves, and the change will be produced in those nerves, and in the centre of sensation; *but the mind being occupied with some other object, will not perceive the change in that centre, and therefore there will be no sensation; I shall not be conscious that such an object was presented to the organ of sense.*" Now, if we are to take the literal acceptation of the lines in italics, viz., that so long as the mind is engaged, there can be no sensation of smell, and, therefore, in order that this sense may be called into action, the mind must be perfectly unoccupied, it will, so far as my experience goes, be opposed to facts. I do not deny, that in some instances, it may be the case; but I have so frequently met with cases in my own person, where, in my walks, my sense of smell has informed me of the unhealthiness of places, although my mind has been occupied with matters quite foreign to such a subject, that I think some qualification is needed of the words I have thought it necessary to allude to.

I am, dear Sir, yours respectfully,

ALFRED MARKWICK

19, Langham Place, May 27, 1850.

[We think that sufficient qualification is given to the statement to which Mr. Markwick refers in Dr. Todd's lecture, by the term "engrossing," used at the beginning of the passage. If the attention be thoroughly engrossed and fixed upon some object, a sensation will not be produced, unless the impression be so powerful as to excite a considerable physical change in the centre of sensation, which of itself is sufficient to disturb the intellectual centre.—ED. *Medical Times.*]

ON THE TREATMENT OF PSORIASIS.

[To the Editor of the Medical Times.]

SIR,—The "Selections from Foreign Journals," which appear in the *Medical Times*, form by no means the least interesting department of your Journal. We are naturally desirous to know how medical science advances in our foreign schools, and have frequently found ourselves disposed cheerfully to acknowledge our obligations to our fellow-labourers abroad, for discoveries of importance. At the same time, it must be acknowledged that the French Physicians and Surgeons, although the former are excellent chemists, and the latter adroit operators, are both far behind us in the principles and practice of therapeutics, especially that department which belongs to the Materia Medica.

In the study of Dermatology, English Practitioners have looked up to the French. They have revered the Hospital of St. Louis, and hailed with eager praise every good English translation of French publications on diseases of the skin. And yet it is plain that the French writers do not agree with us as to the very first principles of rational treatment.

In an extract from the *Bulletin de Thérapeutique*, which appeared in the *Medical Times* on the 4th of this month, entitled "Remedies for Psoriasis," M. Emery is reported to have stated, that the best plan of treatment for that disease is Fowler's solution internally, and pitch ointment externally, that the ointment is necessary to "efface" the scales, and the arsenic to diminish their thickness; and that, "while using both of these remedies together, which he did on the recommendation of Cazenove, that the disease was cured in two different ways at the same time." He then speaks of other external applications which "may be serviceable;" and although one of them (the ointment of protoioduret of mercury) "occasionally causes salivation," and another of them (the ointment of ioduret of sulphur) is "very irritating to the skin," and is said even to have induced an attack of erysipelas; and, although a third (baths containing seven drachms of bichloride of mercury in each) produced "violent symptoms" in some cases, and "evidences of salivation" in others, without producing a particle of benefit in any one out of twenty-two cases, yet M. Emery not only speaks of these remedies with complacency, but, "undaunted by failure," again tries the mercurial baths on twenty other patients, from twelve to thirty-five baths being administered to each. The result was loss of appetite and rest, emaciation, vomiting, cerebral symptoms, and nervous trembling of the limbs. In none of the cases of psoriasis was the disease cured by these baths; on the contrary, in four it got remarkably worse. But French practitioners are not soon "daunted." At M. Emery's request, M. Gibert also tried the baths in fifteen cases with the same want of success. But, lastly, M. Emery administers arsenic by increasing the dose one drop (of Fowler's solution) every day, until twelve are given, unless dangerous symptoms supervene.

I now ask, Sir, what English Practitioner, after reading the above, would send his son or pupil to Paris to gain a knowledge of cutaneous therapeutics? for,

First: Psoriasis is not a specific disease; its origin and nature are various, and its successful treatment must depend upon various circumstances; and, though it cannot be cured in "two different ways at the same time," it may be cured in several different ways in different cases. It may be syphilitic in its origin or scrofulous, or symptomatic of rheumatism, gout, dyspepsia, plethora, or anæmia. It may be caused by local irritation, by filth or vermin, by constitutional tendency, by eruptive fevers, by sea-bathing, or by handling sugar, flour, or other substances. Now, to talk of one remedy, or of two, for such a disease, or rather for diseases so various, implies either an ignorance or a thoughtlessness not quite consistent with our notions of philosophy.

Secondly: Allow me to ask why, in those cases which are curable by arsenic, should local applications be used at all, especially such as do nothing but harm? Why not allow the arsenic to do its work alone? "When the patches become less thick, and begin to assume a blackish grey colour," says Mr. Emery, "the dose (of arsenic) need no longer be increased, these symptoms being a sign of saturation." But, if pitch ointment is to be applied daily to the patches, I submit that their appearance must present a somewhat fallacious test of the arsenical saturation, a point of no small importance and peril. Under arsenic administered alone, we can, indeed, safely and securely watch its effect on the skin, as well as on the conjunction, which is a far better test of "saturation;" but all external applications more or less mask the effect of the remedy, and leave us in the dark with the poison in our hands.

Thirdly: By directing the arsenic to be given in *increasing* doses, Mr. Emery betrays an ignorance of the remarksbly cumulative effects of this remedy, or, at all events, an ignorance of the advantages of administering it in *decreasing* doses,—a practice which, from its well-known superior safety and efficacy, has now become all but universal in England.

It is not my purpose, at present, to enter more fully into the medicinal action of arsenic, as I hope to do on a future occasion; but the preceding observations may be useful, by way of caution, to the juvenile readers of the *Medical Times*. The zeal, and energy, and devotion to science displayed by many of our brethren across the Channel are, indeed, exemplary; but, in the medical treatment of local diseases, they appear to be at least half a century behind us.

I am, Sir, yours respectfully,

THOMAS HUNT.

26, Bedford-square, May 13, 1850.

HEALTH OF LONDON DURING THE WEEK ENDING MAY 25.

In the week ending last Saturday, the deaths registered in the Metropolitan districts were 866, a number which, it is satisfactory to find, is still below the average corrected for increase of population, though it almost exactly coincides with the average if taken without such correction. During the corresponding weeks of ten previous years, 1840-9, the deaths rose by nearly constant progression from 795 in the first year, to 979 in 1848; the average, with an addition for present population, is 944, compared with which, the number returned last week shows a decrease of 78. The deaths included in the zymotic or epidemic class amount, in the present return, to 156; the corrected average is 196. Of special epidemics, small-pox was fatal to 6 children and 2 adults; scarlatina to 13; both diseases, but particularly the latter, showing a less mortality than usual. Measles destroyed 23 children, and a man of 35 years, who, according to Medical certificate, died of "measles (7 days), typhus (5 days);" hooping-cough 35 children; these diseases, at present, do not vary much from the average. 11 persons died of diarrhœa. 32 persons died of typhus. 12 women died in childbearing, to 6 of whom death is ascribed to puerperal fever. Diseases of the respiratory organs, exclusive of consumption, numbered in the last week 138, being more than have occurred usually at this season of the year; the average is 112. Consumption carried off 125 persons; it fluctuated in the corresponding weeks of 1840-9, between 103 deaths and 163.

The deaths in the several hospitals of London occurred as follow:—

GENERAL.			
St. George	9	Sussex & Brandenburgh-house (Fulham) ...	0
Westminster	1	Northumberland-house	1
Grey Coat Hospital ...	0	Whitmore House ...	0
Charing-cross	0	Pembroke House ...	0
Middlesex...	3	St. Luke	0
University College ...	3	Miles'	2
Royal Free Hospital ...	0	Warburton's	0
King's College	1	Lunatic Asylum, Bow ...	1
St. Luke, City-road ...	0	Bethlem	0
St. Bartholomew... ...	4	Lunatic Asylum, Brixton	0
London	3	Retreat, Clapham ...	0
Guy's	8	York House, Battersea ...	1
St. Thomas	5	New County, Wandsworth	1
Bethlem, London-road...	0	Peckham House ...	0
FOR CONVICTS.		Camberwell House ...	0
Hospital Ship, Unité ...	4	LYING-IN.	
Penitentiary Hospital, Millbank	0	Queen Charlotte's ...	0
MILITARY AND NAVAL.		British	0
Royal Hospital, Chelsea (South)	0	City of London	1
Royal Hospital, Greenwich (East)	4	Hospital, York road, Waterloo 2nd part ...	0
Royal Military Asylum	0	FOR PARTICULAR CLASSES.	
Coldstream Guards Hos.	0	Female Servant Invalid Asy., Stoke Newington	0
Grenadier Guards' Hospital	1	German Hospital... ...	1
Scots Fusilier Guards ...	0	French Hospital	0
Royal Ordnance	0	Portuguese Jews' Hospital	0
Dreadnought Ship ...	0	German Jews' Hospital	0
LUNATIC.		FOR SPECIAL DISEASES.	
Kensington House ...	0	Small Pox	2
Munster-house (Fulham)	0	Fever Hospital	3
Normand-house(Fulham)	0	Lock	0
Otto-house (Fulham) ...	0	Consumption, Brompton	1
Blacklands-house ...	0	Opthalmic, Charing Cross	0

TOTAL, 56.

MORTALITY TABLE.

Deaths in the Week ending Saturday, May 25, 1850.

(Metropolis.)

CAUSES OF DEATH.	Total.	Average of Ten Weeks.
ALL CAUSES	866	865
SPECIFIED CAUSES	855	860
Zymotic (or Epidemic, Endemic, and Contagious) Diseases	156	179
SPORADIC DISEASES:		
Dropsy, Cancer and other Diseases of uncertain or variable seat	48	48
Tubercular Diseases	168	185
Diseases of the Brain, Spinal Marrow, Nerves, and Senses	102	116
Diseases of the Heart and Blood-vessels	36	26
Diseases of the Lungs, and of the other Organs of Respiration	138	102
Diseases of the Stomach, Liver, and other Organs of Digestion	57	55
Diseases of the Kidneys, &c.	8	8
Childbirth, Diseases of the Uterus, &c.	9	9
Rheumatism, Diseases of the Bones, Joints &c.	6	6
Diseases of the Skin, Cellular Tissue, &c.	3	1
Malformations	1	1
Premature Birth and Debility	18	20
Atrophy	18	13
Age	39	50
Sudden	10	11
Violence, Privation, Cold, and Intemperance	38	26
Causes not Specified	11	5

The following is the number of Deaths occurring from some of the more important special causes:—

Apoplexy	24	Heart	32	Phthisis	125
Bronchitis ...	60	Hooping-cough	35	Pneumonia ...	49
Cholera.....	...	Hydrocephalus	22	Scarlatina	13
Childbirth	6	Influenza	2	Small-pox	8
Convulsions...	27	Liver	12	Stomach	8
Diarrhœa	11	Lungs	10	Teething	10
Dropsy	18	Measles	24	Typhus	32
Erysipelas ...	8	Paralysis	19	Uterus	3

BIRTHS AND DEATHS.

	Births.	Deaths.	Births over Deaths.
Males	676	459	217
Females	666	407	259
Total.....	1342	866	476

METEOROLOGY OF THE WEEK.

Day.	Mean of Barometer.	Mean of Thermometer. Dry.	Ditto. Dew Point.	Difference between the Mean Temperature of the day and the same day on an average of 7 years.	General Direction of Wind.		Amount of Horizontal Movement of the Air.	Rain in Inches.	Electricity.*
Sunday	29·649	54·9	48·9	+ 2·8	A.M. Calm & E.	P.M. E.	Miles. 75	0·07	Negative, with strong tension at 2 p.m.
Monday	29·593	53·9	46·9	+ 1·1	E.N.E.	E.N.E.	85	0·01	Positive, with tension variable generally throughout the day.
Tuesday	29·392	60·0	49·4	+ 6·3	N.E.	N. & E.	80	0·00	Nothing was shown throughout the day.
Wednesday.	29·439	53·1	49·9	— 1·4	E. and W. passing S.	S.E.	90	0·18	Nothing was shown throughout the day.
Thursday ...	29·387	57·4	50·6	+ 2·1	Calm.	S.	50	0·00	Positive, and tension generally strong throughout the day.
Friday	29·312	54·5	49·3	— 1·3	Calm & E.	S.W. & S.S.W. & S.S.E.	195	0·00	Positive, and tension moderate during the morning.
Saturday ...	29·430	54·6	46·2	— 1·6	S.W.		205	0·21	Nothing was shown throughout the day.
Means ...	29·436	55·5	48·7	+ 1·1	N.E. and S.W.		SUM 780	SUM 0·47	

* In this Column, A. stands for Active; N. for Negative; and P. for Positive.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS.—The following gentlemen having undergone the necessary examinations for the diploma, were admitted members of the College at the meeting of the Court of Examiners on the 24th instant:—Messrs. Henry Francis Coley, Cheltenham; John Alfred Haynes, Lewisham; Samuel Dawes M'Morris, Upper Fitzroy-street, Fitzroy-square: Francis George Joynt, Ballina, county Mayo; Thos. Crofts Skinkwin, Cork; James Paterson, Glasgow; Arthur Robert Lomax, Weobley, Herefordshire; William Jones, Llanrwst, Denbigh; Henry Folkard, Old Brompton, Middlesex; Joseph Walter Raleigh Amesbury, Bengal; and Duncan M'Intyre, Coleraine, Londonderry.

APOTHECARIES' HALL.—Names of gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, 23rd May, 1850:—William Milthorp Spence, Otley, Yorkshire; Trevor Morris, Chepstow, Monmouthshire; Samuel Slee Larcombe, Langport, Somerset; Major Charles Dukes; William Cockcroft, Colne, Lancashire; James Paterson, Glasgow; Samuel Alderson Plumbe.

UNIVERSITY COLLEGE HOSPITAL.—The seventeenth anniversary festival was held last week. During the past year the number of poor relieved was 20,583: 1864 being in-patients, 4033 out-patients, 675 midwifery cases, 501 ophthalmic cases, and 14,010 casualties. The expenditure last year exceeded the income by 500*l.*, the debt of the establishment being 3000*l.* The subscriptions announced were about 2010*l.*, including the munificent sum of 1000*l.* from the Rev. Deacon Morrell.

NATIONAL VACCINE ESTABLISHMENT.—The report for 1850 states that, during the past year, 172,944 charges of vaccine matter have been distributed, and 9,089 children vaccinated by the surgeons appointed in the London districts. Returns of 114,110 cases vaccinated with lymph supplied by the Institution have been received. The mortality from small-pox in the metropolis, for eight years, is stated to have amounted to 7,039. From statistics, it appears that the number of persons under one year of age who were vaccinated, exclusive of those operated on at the cost of their parents, amounted to no more than 33 per cent. of the total number of births registered in the same period.

M'CANN *v.* FERGUSON.—In this case, which was tried in the Westminster County Court, the plaintiff sought to recover 14*l.* 11s. 6d. for Medical attendance, with medicines, for the defendant's wife. The Judge asked Mr. M'Cann for his "certificate." The answer was, "he did not consider that he was called upon to produce it." The Judge stated, that he would take that opportunity to inform the Medical Profession, *that unless they come before the Court provided with their stamped certificate, most unquestionably would they be non-suited.* This having been obtained, Mr. M'Cann deposed as to the nature of the disease under which Mrs. Ferguson laboured, and the treatment he had directed. The learned (?) Judge here called *for the ledger, day and scrap-books* of the plaintiff, and *desired him to read the prescriptions.* Mr. M'Cann replied, "What if I do? you may not, perhaps, understand my dictation." Mr. Roberts, for the defendant, contended that, to charge a poor man 14*l.* 11s. 6d. for seven weeks' attendance, was not only wrong, *but illegal.* Although called upon by the Judge to explain the illegality of the charge, Mr. Roberts did not attempt it; but alleged, thereought to be a taxing-master for the doctors as well as the lawyers. (Loud laughter.) The Judge finally pronounced for the plaintiff, after consulting the highest Medical authorities, (he did not name them,) who were of opinion that the bill was a reasonable one.

IMPERIAL SOCIETY OF PHYSICIANS OF VIENNA.—The distinction of Corresponding Member of the above Society has recently been conferred upon Dr. Wright, of Birmingham.

MEDICAL JOURNALISM IN FRANCE.—It would seem as if the Medical journals in France had suffered severely from the consequences of the revolutionary condition of the country. They appear with great irregularity, and, from certain proposals issued by the proprietors of some of them, we may gather that their subscriptions flow in but scantily. The *Gazette des Hôpitaux* offers to supply its subscribers, on condition of their paying nine francs additional to their annual subscription, with a copy of a Work entitled, "History of the Voyages made from 1837 to 1847, in the Five Parts of the World," a work in five volumes; also, with a five franc ticket in the National lottery of artists, and a fine engraving. The book alone is said to be worth twelve and a half francs. Not to be outdone, the owners of the *Revue Clinique* promise all these valuable properties for the sum of four francs, in addition to the yearly subscription. The *Abeille Médicale* contents itself with promising its subscribers the treatise on visceralgia by Dr. Comet, while the *Union Médicale* contains an invitation to its readers to attend the literary *soirées* given by the editor and sub-editor.

THE YELLOW FEVER.—Accounts from Pernambuco state, that this fearful epidemic is abating there—it is presumed, in consequence of heavy rains. In Rio its ravages continue to be as fatal as before: it is computed that upwards of 10,000 lives have been lost by it since the 1st of January. The catacombs in the churches are all full, and they have been obliged to dig a large hole in the ground at Catumbi Grande, to bury the dead in. One of the letters from Rio says, "Death is around us, and our friends and acquaintances disappear from the scene daily. Consternation is in every face, and apprehension in every mind. Only physicians, apothecaries, and undertakers are in request. Business of all kinds is at a stand. No one ought to come to Rio, until it be declared free and uninfected."

Pearson, who murdered Dr. George Wilson, near Edinburgh, has been acquitted on the ground of insanity.

ALARMING FIRE AT ST. GEORGE'S HOSPITAL.—A fire occurred lately in St. George's Hospital, Hyde-park-corner, which for some time threatened destruction to the whole buildings. The engines of the parish and London brigade quickly attended, but, owing to the praiseworthy exertions of the inmates and strangers, the fire was nearly extinguished by the time the firemen arrived.

WE understand a Bill will shortly be brought before the House of Commons for restricting the sale of poisonous drugs.

WATER-DRESSING.—Most Practitioners are agreed as to the value of the water-dressing. Hitherto the great difficulty has been the want of adequate means to elicit all its advantages. We think, however, the difficulty has been at length overcome, and we earnestly recommend to the attention of our readers the admirable method proposed by Mr. Markwick.

TO CORRESPONDENTS.

Hospital Reports.—In our last Number, under the head of "Hospital Reports, St. Bartholomew's Hospital," it should have been stated, that the patient was brought into the operating theatre to be *sounded*, and, if a stone were found, for the operation of lithotrity. But, after a most careful examination, both with a sound and the lithotrite, Mr. Lloyd was unable to discover a stone. And this case only illustrates a fact well known to every surgeon of experience, that a small stone in the bladder will, on some occasions, elude every attempt to touch it with the sound. Previously to introducing the sound, Mr. Lloyd stated to the students, that, in this case, there had been great difficulty experienced in detecting the presence of a calculus. He stated, that the surgeon who had first discovered it had never been able to do so again, although he had subsequently sounded the bladder on five or six different occasions. An eminent surgeon at Oxford, moreover, had also twice or thrice sounded the patient, but unsuccessfully. Mr. Lloyd also said, that he had himself twice sounded, and only once found what he considered a very small calculus. The bladder, too, was very capacious. Mr. Lloyd added, that he had stated these facts to prevent disappointment, as it was very possible he might fail on this occasion in discovering the stone. That Mr. Lloyd was right in not persevering in searching for the stone (as he was advised to do by some around him) is proved by the fact, that the patient has subsequently suffered rather severely from inflammation and swelling at the neck of the bladder. Mr. Lloyd said not a word about opening "the bladder," as reported in our last Number. It was not "the bladder," but the lithotrite, he made a rule not to open till the stone was felt.

A Correspondent calls our attention to the two following syllogisms of, two journalists:—1. "By a writer in the 'Medico-Chirurgical Review.' The infinitesimal remedies of homœopaths have no influence whatever on disease; but diseased people occasionally recover under homœopathic treatment. Therefore, disease may be cured without drugs." 2. "Syllogism in answer thereto, by the 'Lancet.' The homœopathists believe, when diseased people recover under their care, that the cure is due to the potency of their infinitesimal remedies; but the writer in the 'Medico-Chirurgical Review' believes that infinitesimal doses of medicines have no influence whatever on disease. Therefore, the writer is a rank homœopathist!" (Vide Leader in "Lancet" of May 25.)

[This marvellous conclusion illustrates a classical adage: "Quem Deus vult perdere prius DEMENTIT."]

Income-tax.—"X. Y. Z." writes:—"I am the junior partner in a medical firm. After making all the allowed reductions, my income may be brought below £150 per annum. The joint receipts, of course, are considerably above the stipulated amount. Am I, as a member of the firm, the total receipts of which are above the amount, bound to pay my share of Income-tax? or may I appeal on my own division of the receipts, without reference to the other members in the business? I shall feel obliged if you will give me an early answer to these questions."

["X. Y. Z.," we conceive, has only to return the amount of his own receipts.]

Our Paris Correspondent.—Dr. MacCarthy requests us to announce, that he is not the Paris Correspondent of this Journal. It is several months since Dr. MacCarthy ceased to render us his valuable assistance in that capacity.

"Un élève."—No guardian of a parish, or board of guardians, can compel paupers to be attended in their confinement by a midwife. The medical officer is the only legitimate attendant upon such occasions.

"M.D., Tunbridge-wells."—It is utterly impossible to comply with the wishes of all friends. The matter in question is definitively arranged; and we can only trust M.D. will not be as much inconvenienced as he imagines.

"Dr. Campbell" makes mountains of molehills. We readily, however, comply with part of his request—we suppose the most essential—and now inform medical men who may visit Paris, upon the Doctor's authority, that the Society over which he presides—the Parisian Medical Society—"has never been in a more flourishing condition than during the past session; and that meeting in the same rooms with the German society is looked upon as of mutual benefit."

Proposed University at Sydney.—Many Correspondents inquire about this new Institution. We shall be obliged for information upon the subject.

"A Constant Reader at Bristol" will have no difficulty in obtaining the Kousso from any of the large pharmaceutical houses in London. It is very expensive, 15s. or 16s. a dose; one dose, however, suffices to expel the tænia.

We are much obliged to "L. L. L." Although at present we do not require his services, we may hereafter. Will he, therefore, favour us with his name and address?

We shall gladly receive Mr. Kay's proposed communications. We will also consider his suggestions.

ORIGINAL LECTURES.

HUNTERIAN LECTURES
ON THE
GENERATION AND DEVELOPMENT OF THE INVERTEBRATED ANIMALS.

By RICHARD OWEN, F.R.S.,
Hunterian Professor and Curator of Museum of Royal College of Surgeons, Corresponding Member of the Institute of France, &c.

[Reported expressly for the "Medical Times," and revised by the Lecturer.]

LECTURE XIX.

Generation of Mollusca.—General characters of this great group of Invertebrata, and of its primary divisions and classes.—Acephala Tunicata.—Relations of the Compound Ascidians to Polypes, and their propagation by gemmation as well as ova.—Supposed androgynous species.—Generative organs of dicœcious Ascidiæ.—Development and Metamorphoses of Ascidians.—"Alternate generation" of viviparous Salpæ.—Brachiopods dicœcious: their ramified testes and ovaria.—Lamelli branchiata.—Alleged androgynous character of Pecten.—Dicœcious condition the rule in lamellibranchiate bivalves.—Male and female organs bulky but simple: short sperm-duct of males; short oviduct of females: no glandular appendages and no intromittent organ.—Modifications of gills to form marsupial pouches.

Mr. President and Gentlemen.—In the preceding Lectures on the generation of the *Articulata*, we have traced the organs related to that function from a very low to a very high grade of development. Nevertheless we were far from being able to pursue the course of that development in one uninterrupted and regularly ascending series. Although the Articulate division of the animal kingdom is a truly natural one; yet the relations of its principal classes are best illustrated by the image of a tree; the crab, the winged insect, and the spider, crowning as many branches diverging from a common vermiform root or stem. And when we attain the summit of any of these branches, we find ourselves at an almost equally remote distance from any of the vertebrate forms of animal life. How vast the hiatus, for example, which separates the worm from the lamprey, the crab from the tortoise, and the beetle from the bird or bat! The naturalist, guided in his quest of natural affinities of animals and their order of progress by the light of comparative anatomy, soon attains the conviction, that there is no regular and uninterrupted ascent in the scale of organization, as Bonnet fancied; no single and continuous chain of beings; no necessitated connexion of such, as was sung by Pope:—

"From Nature's chain, whatever link we strike,
Tenth or ten-thousandth, breaks the chain alike."

How marked an evidence of the subsequent progress of the science of animal life is this testimony of the belief of the bard of Twickenham, in which he has recorded, in imperishable verse, the convictions of the most cultivated minds of his day!

Not even with the insight which we now command into the living forms that peopled this planet during past and remote epochs of its history, can we supply all the actual hiatuses and connect together in a linear series the existing and extinct members of the animal kingdom. But we can discern that many connecting links in partial series have perished; and we know that the broken hypothetical chain of being, nevertheless, continues to flourish and to adequately fulfil its appointed office in maintaining the balance of the conflicting influences of increase and decay, and the general well-being and progress of organic life upon the present surface of the earth.

If we would make a closer approach to the vertebrate type of organization, we must retrace our steps, and again returning to the Radiata, ascend by another and very different series of animals from those which have occupied our attention in the last eleven Lectures.

In the Articulata the advance is most conspicuous in the organs peculiar to animal life, and was manifested in the powers of locomotion, and in the instincts, which are so various and wonderful in the insect class.

In the Mollusca the developmental energies seem to have been expended chiefly in the perfection of the vegetal series of organs, or those concerned in the immediate preservation of the individual and the species.

The Mollusca are so called on account of the soft unjointed nature of their external integument. The scattered centres of the nervous system, according to the Heterogangliate type of that dominant system, is often accompanied with an unsymmetrical form of the entire body, which, in compensation for the low condition of the perceptive energies, is protected in most of the species by one or more dense calcareous plates called shells.

All Mollusca have a complete alimentary canal, with mouth, stomach, intestine, and vent, and are provided with a circulating and respiratory system.

The nervous system consists of a medullary collar, surrounding the œsophagus, and communicating with more or fewer ganglions near the œsophagus, or dispersed, usually below the alimentary canal, in other parts of the body.

In a large proportion of the lower organised Mollusca there is no head, and no brain: no nervous centre being needed above the gullet for the reception of the impressions received by special organs of sense. The inlet for the food is simply a pharynx or beginning of the œsophagus without jaws, tongue, or mouth properly so called. Such Mollusca are termed *Acephala*. All other Mollusca are provided with a head, which generally supports feelers or soft tentacula, eyes, and a mouth armed with jaws. The sub-kingdom may thus be primarily divided into *Acephalous* and *Encephalous* Mollusca.

The acephalous Mollusca are all aquatic, and are divided into classes according to the modifications of their integument or of their gills.

The *Tunicata* are those which are enclosed by an elastic gelatinous uncalcified integument; they breathe either by a vascular pharyngeal sac, or by a riband-shaped gill stretched across the common visceral cavity. Hunter, who had anatomised the typical forms of this class, and had recognised the homology of their flexible case to the shells of the bivalves, to which mollusks he saw that Banks's "Dagyza" and the "Squirters" of our own shores were most nearly allied, grouped the *Salpæ* and *Ascidiæ*, as they are now called, together into a natural family, which he termed "soft-shelled;" this family is the same as that afterwards defined and called "shell-less Acephala" by Cuvier, and Tunicata, by Lamarck. All the other Acephala have their integument calcified.

The *Brachiopoda* are defended by a bivalve shell, have two long spiral arms developed from the sides of the mouth, and respire by means of their vascular integument or mantle. One valve of the shell is applied to the back, the other to the belly of the animal, which is rooted by a pedicle to some foreign body.

The *Lamellibranchia* are bivalve conchiferous Mollusca, which respire by gills in the form of vascular plates of membrane attached to the mantle. One valve is applied to the right side, the other to the left side, of the animal. The common oyster and mussel are examples of this best known class of Acephalous Mollusca.

The Encephalous Mollusca are divided into classes according to the modifications of the locomotive organs.

The *Pteropoda* swim by two wing-like muscular expansions extended outwards from the sides of the head.

The *Gasteropoda* creep by means of an undivided muscular disc attached to a greater or less extent of the under part of the body.

The *Cephalopoda* have all or part of their locomotive organs attached to the head, generally in the form of muscular arms or tentacula: in this class only do we find, in the present series of animals, an internal skeleton. In the rest of the Mollusca the hard parts are external; but the integument is sometimes uncalcified and flexible, as in the low organised class which will occupy our attention to-day, and which, in this condition of their exo-skeleton, afford the parallel to the cartilaginous state of the endo-skeleton in some of the lowest of the vertebrate series.

To connect the Tunicata with any of the classes of animals which we have previously considered, it is necessary to revert to the Polypi, for it is in this group of the Radiata that we shall find the animals which have the closest natural alliance with the present class of Mollusca.

Suppose a Bryozoon to have its ciliated oral tentacula reduced to mere rudiments, and to have the pharynx enormously expanded, with its vascular internal surface richly beset with vibratile cilia; it would then be converted into an Ascidian, and the transition from the radiated to the molluscous type would be effected. Such a transition would have been made in regard to outward form; for it is chiefly by reason of the external character of the crown of radiating tentacles that the Bryozoa have been placed in the radiated sub-kingdom. Their minute size, fixed position, and gemmiparous propagation, added, doubtless, to the belief in their being *Polypi*. But relations of size have no value in classification; the mouse is as good a mammal as the elephant. Propagation by buds is a common mode of procreation in the lower soft-shelled mollusca, which are equally rooted to the soil. Are we, then, to regard the dilatation of the pharynx as a modification of internal structure of such value as to be interpreted as a transition from the radiated to the molluscous type? Many zoologists of the present day, seeing that the Bryozoa differ from the Anthozoal and Hydriform Polypes in their complete alimentary canal, prefer to associate them with the Tunicata, and to place them at the base of the molluscou sub-kingdom. We shall presently see that there are some facts in the development of the Ascidian Tunicata that oppose the amalgamation; and I allude to this mode of viewing the affinities of the Bryozoa rather as an additional illustration of the molluscous series constituting a great parallel branch of the animal kingdom with the articulate series; both springing from a low base in the scale of organization.

The compound Ascidians are arranged in different modes, and under different forms; some, as the beautiful Diazona, diverging like the petals of a compound flower from a common base; others, as the Botryllus, are arranged in circles round a common central aperture, beneath which the anal extremity of the intestine of each individual terminates, and many of these circles of individuals are aggregated together, and enveloped in a common gelatinous tunic; others again are ramified, and their tunics are so transparent, as to permit the movements of the internal organs to be studied in the living animal. A very singular condition of the circulating system has thus been detected. The blood actually moves backwards and forwards, to and from the heart in the same vessels, as it was supposed to ebb and flow in the human veins before Harvey's great discovery. The oscillation of the currents is not constant and regular; the blood is received from the vessel at one end of the heart, and propelled by a contractile wave into the vessel at the opposite end; after a true circulation has gone on in this course for a certain period, a change is observed in the course of the peristaltic contractions of the heart; the blood for an instant stagnates in the vessels, and then the wave travels in the opposite direction; the heart drives the blood into the vessel from which it had before received it, and the course of the circulation is reversed. In the compound Ascidians the vascular systems of the different individuals anastomose freely with each other.

At first sight it is difficult to conceive how the fixed and compound Ascidians can multiply their race in situations at a distance from that which they themselves occupy. This difficulty has been removed by MM. Audouin and Milne Edwards, who observed that the young of the compound Ascidians were not only at their origin solitary and free, but possessed the power of swimming rapidly by the aid of the undulatory movements of a long tail. They were seen occasionally to attach themselves to the side of the vessel of sea-water containing them, and then to recommence their course, as if to seek a more suitable point of attachment. After two days of free and locomotive life, they finally fixed themselves; and, when detached from their place of settlement, remained motionless, having lost their power of progression.

These phenomena are now known to be common to the embryo of many of the lower sedentary animals. In regard to the Ascidians, it has been confirmed by M. Sars in the *Botrylli* of the coast of Norway, and has been more recently observed by Sir John Graham Dalyell, in a solitary Ascidian of the Frith of Forth.

In some species of the compound Ascidians, *Amaroucium proliferum, e.g.*, M. Milne Edwards has figured and described parts which he considers as the male and female organs combined in the same individual. The testis is a lobulated gland beneath the ovarium, provided with a long vas deferens, which terminates near the anus, in the common cavity of the muscular tunic.

The solitary Ascidiæ are of distinct sex; these are much larger than the compound species, and their anatomy is more easily and clearly made out.

A generative gland, generally dendritic in shape, occupies the concavity of the intestinal fold, and sends a short and simple duct to terminate near the anus. In the female of the large Ascidians, called *Cynthia tuberculata*, there are two ramified ovaria; the ovisacs being appended to the branches of a central stem, passing up by the side of the rectum, and extending over one side of the branchial sac.

The heart is a simple, elongated, vasiform muscle, inclosed in a pericardium, attached to the branchial sac; continued at either end into a vessel; the ramification of one being expended chiefly upon the respiratory organ; those of the other upon the viscera and tunics of the body. According to the direction of the circulating currents the one will be an artery, the other a vein, and the circulation itself will be pulmonic or systemic.

The nervous system must be first sought for in the interspace between the two openings of the muscular tunic; there you will find a ganglion, from which it is not difficult to trace filaments diverging to each aperture of the sac where the circular disposition of the muscular fibres prevails; other branches accompany the longitudinal fibres, and supply the respiratory sac; two contiguous filaments are continued to the œsophageal orifice.

In the animal manifesting this organisation, which is much richer, unquestionably, than the amorphous and rugged exterior would seem to promise, the only vital actions obvious to ordinary vision are an occasional ejection of water from the orifices of the tunic by a sudden contraction, succeeded by a slow and gradual expansion. Such contractions and expansions, aided by the ciliary currents, which the microscope has detected, and the peristaltic movements of the alimentary, circulating, and secerning tubes, are all the actions which the organic machinery has to perform in the living Ascidian.

The respiratory currents of sea-water with the nutrient molecules in suspension are introduced by the ciliary action through the branchial orifice into the pharyngeal respiratory sac, from which the œsophagus selects the appropriate food. The alimentary excretions and the generative products are expelled through the anal outlet by the contraction of the muscular tunic.

In the genera of *Polyclinum* and *Amaroucium*, amongst the compound Ascidians, Dr. Edwards has observed that the ovum, whilst still included in the ovarian mass, consists of the small central germinal vesicle, of a granular vitellus, and a vitelline membrane. In the progress of the ovum to the cloacal cavity, the yolk acquires a deep yellow colour, the germinal vesicle disappears, and in its place there is a nebulous speck upon the surface of the yolk. This is doubtless the remains of the germinal vesicle, which has come to the surface of the yolk to meet the impregnating influence, and has undergone the changes by fissiparous multiplication, to which I have so often had occasion to allude. Dr. Edwards has observed the contact of the spermatic animalculæ with the ova in the cloaca.

The next stage which he records, viz., the granular or mulberry structure of the vitellus, is the result of the spontaneous divisions and assimilative powers of the yolk cells. The subdivided mass through which the properties of the hyaline and fertilising principle have been diffused, is next covered by what appears to be the expansion of the germ-spot, or a propagation from that centre of nucleated cells, closely pressed together into hexagonal forms, constituting what Herold calls the "cambium" in the spider's ovum, and forming the basis of the integument. A process of this integument then begins to extend from a particular point, and, rapidly elongating, wraps itself like a cord about the vitellus. This body, with its integument, then becomes condensed, and separates from the chord, which, retaining only its basal attachment to the pellucid integument, forms the caudal appendage. The integument increases in thickness. The extremity of the yolk opposite the caudal attachment developes a series of cylindrical productions, which reminds one of the arms of a polype, but they are few in number. Three of them have expanded extremities which increase in length; whilst the other processes diminish, and finally disappear. A spiral filament is continued from the membrane of the vitellus down the centre of the tail.

In this state the embryo escapes from the ovum, generally while in the cloaca of the parent, but sometimes after the egg has been expelled from the common central outlet. The young animal immediately unfolds its tail, and begins to swim like the tadpole of the frog, which it so much resembles in form. The three clavate cephalic processes are the organs by which it effects its final adhesion and settlement. When this has taken place, the tail shrinks, and is usually detached by progressively increasing contraction at its base;—a kind of spontaneous fission.

The sessile and adherent trunk now becomes the seat of an active development: the integument is thickened; the yolk becomes elongated and divided by a circular constriction into two unequal parts, in each of which a clear spot can be recognised. One of these spots, by subsequent development, becomes the heart; the other the respiratory sac. The subdivided vitelline mass, which now begins to be rapidly metamorphosed into the special tissues, also acquires a distinct tunic, which soon separates itself from the thick and gelatinous external integument. The quadrifid orifice of the branchial sac is first formed upon the internal tunic. The contour of the great respiratory pharynx can next be discerned, and the constriction of the sac opposite to the mouth, which indicates the œsophagus. About the same time may be seen the outline of the anal orifice upon the internal integument: then the opaque yellow tunics of the dilated stomach, and the reflected intestine appear; and below these parts the pulsations of the large transparent vasiform heart render that organ conspicuous.

The whole of the viscera included by the smooth integument have been observed to rotate in the cavity formed by the thick gelatinous tunic, to which the visceral mass again becomes attached by the adhesion of the muscular tunic at the branchial and anal orifices, and by the establishment of corresponding orifices in the integument.

Savigny was of opinion, that the ovum of the compound Ascidian contained the germs of all the individuals composing the characteristic groups in the mature aggregate animal, and that their development was simultaneous. In one sense, doubtless, the ovum contains the germs of all the future individuals developed by gemmation, in so far as a portion of the germ-mass is retained unchanged in the body of the first developed individual; but the cell-progeny of the primary germ-cell, constituting that germ-mass, are not simultaneously developed: nor does any development begin until the first individual is completed, fixed, and nourished by the actions of its proper digestive apparatus. Thus stimulated and strengthened, the second mode of reproduction, namely, that by gemmation, is superinduced upon the young Ascidian, after the foregoing development from the impregnated ovum, which offers an interesting analogy to the phenomena presented by the polype-larva of the Medusa. The individuals formed by the gemmation of the primary bud of the young Ascidian, instead of being detached, are retained; the process of gemmation being regulated so as to produce the characteristic pattern in which the different individuals are grouped in the mature compound animal.

The gemmation commences by the development of a small tubercle from the abdominal portion of the internal tunic of the young Ascidian. This is prolonged, retaining an active circulation in its interior, and is accompanied by a corresponding growth of the outer gelatinous integument, which becomes clavate. The process then bifurcates; the divisions, in like manner, becoming elongated, expanded, and bifurcated at their extremities. Soon the outline of an Ascidian is sketched in each of these extremities. The primitive connexion with the parent is obliterated; but the young individuals remain united together by their primitive peduncle, according to the law which determines their mode of grouping into systems. By the progressive increase of their outer gelatinous integument, they coalesce and form the compound mass.

The procreative force of the germ-mass finally exhausts itself in the formation of the male and female organs; in which that force is, again, mysteriously renewed, under its two forms of the spermatozoon and the germinal vesicle, by the combination of which the reproductive cycle again begins its course.

On comparing this course with that which we long ago traced in the Bryozoa, we shall find one difference, in addition to the absence of the crown of radiating tentacles, and the presence of the vascular respiratory sac, which distinguishes the compound Ascidians from the Bryozoa, and which seems to have been overlooked by those who would associate the two groups. No compound Ascidian quits the ovum as a ciliated gemmule, swimming by means of groups of those vibratile organs aggregated in lobes, after the type of the *Rotifera;* and no Bryozoon, so far as I know, quits the ovum in the guise of a tadpole or cercarian, swimming by the alternate inflections of a caudal appendage.

The second order of the class *Tunicata* includes the Salpians, which float in the open sea, and are characterised by their transparent elastic outer tunic, which is elongated, compressed, and open at both extremities. The muscular fibres of the mantle, or membrane lining the cartilaginous tunic, are arranged in flattened bands. The mouth and stomach, the liver and the heart, are aggregated in a small mass or nucleus, near the anterior aperture of the tunic; the intestine extends towards the opposite aperture, and terminates freely in the common cavity of the mantle. A single narrow plicated ribband-shaped branchia extends obliquely lengthwise across the pallial cavity. The heart is elongated, and in some species slightly curved and sacculated; it communicates with a large vessel at each extremity, one of which is ramified principally upon the visceral mass; the other upon the branchia and the muscular tunics.

From recent observations made by Dr. Edwards on young *Pyrosomata* (a compound genus of Salpians,) it appears that the circulating currents change their direction periodically, by virtue of peristaltic and antiperistaltic vermicular contractions of the heart, as in the Ascidians.

The sexes are distinct in the Salpians, as in the solitary Ascidians. The ovarium or testis is usually of an oblong form, sometimes single, sometimes double, adherent to the inner surface of the mantle; where, likewise, the embryos are developed, attached together in a longitudinal series. The ovarian tube, in which the chain of young salpæ is contained, winds round the visceral nucleus, hanging freely by one end in the cavity of the mantle, and being attached by the other end to the back of the nucleus.

The only conspicuous vital action in the Salpians is the rhythmical contraction and expansion of the mantle; in which the elasticity of the outer tunic antagonises the muscular contraction of the inner one. During expansion the sea-water enters by the posterior aperture, and is expelled, in contraction, by the anterior one; its exit by the opposite end being prevented by a valve. The re-action of the jet, which is commonly forced out of a contracted tube, occasions a retrograde movement of the animal. The currents which successively traverse the interior of the animal, renew the oxygenated medium upon the surface of the respiratory organ, bring the nutrient molecules within the reach of the prehensile subspiral labial membrane of the mouth, and expel the excrements and the generative products. Thus, a single act of muscular contraction is made subservient, by the admirable co-adjustment of the different organs, to the performance of the functions of locomotion, nutrition, respiration, excretion, and generation.

Certain genera of Salpians, as the phosphorescent *Pyrosoma*, are permanently aggregated into a compound organic whole having a definite form. All Salpians quit their viviparous parent associated to-

gether in long chains; after floating for a certain time, each individual, according to Dr. Chamisso, propagates a solitary young one like itself. The solitary salpa, propagated by each individual of the chain, is suspended by a peduncle from the dorsal wall of the visceral cavity of the parent. In the *salpa zonaria*, as many as three of such pedunculated young have been found in one parent; they are developed by a process akin to internal gemmation, from a portion of the germ-mass retained in the situation of the nucleus. When liberated, the solitary salpa grows to the size of the grand-parent, and then brings forth a social chain of young Salpæ, which, by the exercise of their uniparous generation, again give origin to the solitary and multiparous individuals. Thus, observes Chamisso, only the alternate generations resemble each other.

The case is strictly analogous to the generation of the compound Ascidians, of which the solitary young gives origin, by gemmation, to a compound group, which again procreates, by impregnated ova, solitary individuals.

The Brachiopoda, like the Ascidians, are deprived of the power of locomotion, and are attached by a longer or shorter peduncle to foreign bodies. Their muscular tunic or mantle is, as it were, slit open, and consists of two broad membranous expansions, called lobes, which are covered by, and closely adhere to, two calcareous plates, adapted to inclose and defend all the soft parts of the animal.

The Brachiopoda flourished during the ancient secondary periods, and are most abundant in the fossil state. They are, of all Mollusks, the most widely diffused over the earth's surface, and have longest continued; they can exist at greater depths than other bivalves; they are amongst the oldest of existing forms of animal life, their range in time being as extensive as in space. Of the few existing genera, the *Lingula* is characterised by its long peduncle, and the equality of the valves of its shell, neither of which are perforated: the *Orbicula* is sessile, and adheres by one end of a short transverse muscle, which perforates the ventral valve of the shell, which is the flatter valve. The *Terebratula* is attached by a short peduncle, which projects through a hole in a beak-shaped prolongation of the ventral valve, which is the more convex one.

The viscera are situated at the part of the shell next the hinge or peduncle, and are confined to a very small space in the *Terebratula*. The rest of the interspace of the lobes of the mantle is almost entirely occupied by two long ciliated arms, continued from the sides of the mouth, and disposed in folds and spiral curves. The bases of the arms are confluent, and form a transverse fringed band above the mouth: a narrow parallel fold of membrane passes below the mouth, which opens upon the mantle-lobe attached to the perforated valve.

In the *Terebratula australis* each arm extends outwards, advances forwards, curves slightly inwards, and bends abruptly back upon itself, the two parts of the bend being connected together; then the stem again curves forward, and becomes united to the corresponding bend of the opposite arm, the conjoined extremities describing spiral convolutions; the bent portions of the fringed arms are supported by slender and elastic calcareous processes. Remains of more complicated internal calcareous appendages are presented by certain extinct Brachiopods, as the *Spirifer*. In some species of existing *Terebratulæ*, as *Ter. Psittacea*, the arms are disposed in a series of spiral folds: but they have only short and simple calcareous processes at their base. The spiral arms of the *Orbiculæ* and *Lingulæ* have no internal calcareous support. In all the Brachiopods, the stem which supports the brachial fringe is hollow. In the *Terebratulæ* and *Oribiculæ* the spiral terminations of the arms have their central canal surrounded by a double oblique series of muscular fibres; the canal is filled with fluid, and, by the contraction of the muscular fibres, the extremities are extended by the pressure of the contained fluid which is injected into them.

The alimentary canal is very short and simple; in the Terebratula, it soon expands into a gastric cavity, surrounded by groups of the minute hepatic follicles. The Brachiopods are of distinct sex. In the Terebratula and Orbicula, the ovaria are dendritic and attached to the mantle, four on the lobe of the ventral valve, and two on the lobe of the imperforate or dorsal valve. The ova seem to be developed from the inner surface of the large and wide pallial veins to the parietes of which they adhere. The testes in the male have the same form and disposition; they differ from the ovaria in their closer texture and their whiter colour. In the Lingula, the ovaria are larger and more prominent than in the Terebratula, and are similarly attached to the pallial venous sinuses. I found the ova in various stages of development. The embryo is at first without the peduncle; but this is developed before the young Lingulæ quit the parent.

The relation of the contained soft parts to the bivalve shell of the Brachiopoda is such that, in the Terebratula, the perforated valve must be regarded as the inferior or ventral one, and the imperforate, or shorter valve, the dorsal one. In the *Lamellibranchiata* one valve is applied to the right, and the other to the left side of the animal. In the common oyster and the Anomia, which are fixed and motionless, as in the Brachiopoda, the two lobes of the mantle are as little united with each other, and there is as little evidence of any locomotive organ or foot. The spiral brachia would seem to be reduced to two shorter and more simple processes, and the inferior labial fold to be produced on each side to the same length, so that there is a pair of labial processes on each side the mouth. These appendages have no internal calcareous support, which, by being bent, could open the valves; nor are they long enough, save in some species of *Anomia*, to be protruded from the shell. In other Lamellibranchiate Bivalves the labial processes are short and simple. Most of the Lamellibranchiate Bivalves are free and locomotive. The instrument by which they move from place to place is a single symmetrical muscular organ developed from the central surface of the visceral mass. The body and protecting shell is longer in proportion to its depth in these locomotive bivalves; and there are two muscles provided for closing the valves. The superadded one is anterior to the mouth; the analogue of that which exists in the oyster being the posterior adductor. In all the present class the divarication of the valves is provided for by the insertion of an elastic substance at their hinge; and the valves are closed by the contraction of short and thick subcircular muscles, thence called the adductors. In the common oyster, and some other allied Bivalves, there is but one adductor muscle. The bivalves with one adductor muscle are termed "monomyaries;" those with two adductors "dimyaries." The dimyary bivalves have always a foot: in its least developed condition it is subservient to the function of a gland which secretes a glutinous material analogous to silk, the filaments of which serve to attach certain bivalves, as the Pinna and the common mussel, to rocks; these filaments are termed the "byssus." The visceral mass occupies about half the cavity of the shell next the hinge. The rest of the interspace of the pallial lobes being almost wholly occupied by the branchial laminæ, which are four in number, of a crescentic figure, placed two on each side of the visceral mass. This is the characteristic condition of the respiratory organs in the present class of Acephalous Mollusca, and from which it derives its name.

In the oyster the mouth is continued by a short œsophagus to an expanded stomach, from which numerous ramified hepatic follicles are developed. The intestine, after describing a few convolutions, is continued along the interspace of the branchiæ towards the extremities of the branchiæ which are furthest from the mouth. The ovarium or the testis surrounds the intestinal convolutions, and forms with the liver the chief part of the visceral mass.

The latest and best observations of naturalists and physiologists on the sexual characters and generation of the Lamellibranchiata have established the correctness of Leuwenhoek's conclusion that these mollusca are of distinct sexes, some individuals being male and others female. In the small species of *Anomia* parasitic upon fuci on the south coast of England, I have found the males and females nearly equal in number, the males being distinguished by their opaque white testis abounding in spermatozoa, the females by their yellow or orange-coloured ovarium. Professor Milne Edwards has pointed out two substances, of different colours, occupying the abdominal mass in the Pecten. The part to which he restricts the term ovarium occupies the inferior and posterior region of the mass; and sends a duct which traverses a portion of the different-coloured body situated above, and ascends to terminate between the bases of the labial tentacles, the summit of the abdomen, and the anterior ends of the gills.

To the opaque whitish mass occupying the upper and larger half of the abdominal mass he gives the name of testis: it is composed of small vesicles grouped in bunches; its duct is continued into the foot, and terminates by two small orifices opening upon the inferior fissure of that organ.

These are, doubtless, as Siebold suspects, the orifices of the secreting glands of the byssus, and Mr. Edwards has perhaps mistaken the gland and duct of the byssus, with part of the undeveloped ovary, for the testis. He did not apply the only true test of the nature of the uncoloured part, viz., the microscopical examination of its contents.

In the male Lamellibranchiates the testes are double, and have a somewhat more circumscribed form than the ovaria, but sometimes appear to be blended together at the median line: in the oyster they are situated on each side of the liver, and extend in the form of a triangular process between the adductor muscle and the gills. The testes extend at the breeding season in certain genera, as Anomia, Hiatella, Mytilus, and Modiola, into the substance of the lobes of the mantle; but in those bivalves which have a large foot, the testes are confined to the base of that organ. The ultimate texture of the testes is a congeries of vesicles containing a milky fluid, which seems to consist almost wholly of spermatozoa in the breeding season. The vasa deferentia are short and wide, and they open behind the mouth in the oyster, and terminate upon papillæ at the posterior part of the foot in most dimyary mollusca, as the Cardium, Pholas, Venus, &c.

The ovaria have a similar form and position in the female bivalves, but are usually more extensively ramified. The short oviduct and sperm-duct are both strongly ciliated, and open on each side at the base of the foot (or abdomen) with a narrow fissure with tumid borders, either very close to the opening of the kidneys into the mantle-cavity or in the urinary sac itself. At all seasons of the year some ova may be discerned in the ovarian cells, characterised by the germinal vesicle and spot. Towards the breeding season they are developed in immense numbers; and the addition of the coloured vitellus to the essential part of the ovum gives the characteristic colour to the ovaria. They are generally distended with the ova in the winter months. The fertilising filaments retain their influence after being discharged from the males, are drawn in with the respiratory currents, and at the breeding season the ovaries and oviducts contain a milky fluid abounding with the moving filaments. The ova then escape by the short oviducts, which terminate in positions analogous to those of the vasa deferentia. They are conveyed along the basal margin of the internal branchiæ, enveloped in mucus, from the oviducts to the posterior terminations of the interbranchial space, where they enter the canal which traverses the base of the external gill, and pass into the compartments formed by the interspaces of the transverse lamellæ, connecting the outer with the inner wall of the gill. It is by virtue of the currents produced by the action of the vibratile cilia of the mantle and gills that impregnation is effected in the separate sexes of bivalves, and especially of those that, like the oyster, are fettered, male as well as female, to the rocks. Just as the pollen of the rooted male of the dicœcious palm is wafted by currents of air to the moist stigma of the equally fixed and rooted female tree.

YELLOW FEVER AT RIO.—The Tweed, (of the Royal Navy,) has lost three midshipmen, the boatswain, and thirteen men, from yellow fever, during her stay at Rio. People are dying in all directions. This fearful epidemic, still raging at Rio de Janeiro, Bahia, Pernambuco, and Rio Grande, has also spread to St. Catherina, Monte Video, and Buenos Ayres. It has also broken out in several vessels at sea.

THE German journals announce the death of Professor Canstatt, of Erlangen, well known through his work on "The Diseases of Old People."

ORIGINAL CONTRIBUTIONS.

DESULTORY SKETCHES.

By Dr. BUSHNAN.

MEDICAL SCHOOLS AND UNIVERSITY TOWNS OF GERMANY.

BONN.

"*Voilà Bonn!*" said a French lady who beheld the city for the first time, "*C'est une petite perle,*" and the delightful site it occupies on the Rhine; the pleasing regularity, together with the white and cheerful appearance of the houses, and the undulating and beautiful scenery that on all sides surround it—forming, as it were, an appropriate setting to the jewel itself—awaken strong feelings of admiration, and cannot fail to justify the application of an expression as elegant as it is true.

Before I proceed to speak of the Medical school, I must be pardoned if I say something about the town itself, which occupies no mean etation among the ancient cities of the Rhine,—and here I must acknowledge how much I am indebted to my friend Mr. Whitling, of Nuremberg, who has supplied me with much of the material of this sketch. Bonn was originally the principal town of the Ubii—Ara Ubiorum—and was sacred to Mercury. It was afterwards named Verona, Bonna, and Bonnensia Castra. As mentioned by Pliny and Florus, Drusus Germanicus, who lay encamped here for some length of time, erected one of his fifty castles at Bonn; and the holy Maternus, who had received the tenets of the Christian religion from the mouths of the Apostles themselves, converted most of the inhabitants from their Paganism, destroyed their altars, and beat down their statues.

In the course of years a considerable town was formed, which Julian the Apostate, during the reign of Constantine, fortified and encircled by a wall. The Minster was founded in 320 by Helen, the mother of the Emperor, and dedicated to the martyrs Florus and Malusius. Bonn suffered many reverses. Twice was it destroyed by the Normans, and once again, under Charles the Fat, it was laid waste with fire and sword; but it arose again like a phœnix, was again rebuilt, again surrounded by walls; and Conrad, of Hochstedten, in 1240, constituted it a city, and bestowed upon it several rights and privileges, some of which continue to this day. In 1254, it entered into the Hanseatic confederacy; and about fourteen years later, Engelbert, the Elector of Cologne, being driven thence by his rebellious citizens, fixed his residence here, after which it became the favourite abode of the succeeding electors, who displayed considerable taste in the improvement of this small but beautiful city.

Some idea may be gathered of the high sense that was in former times entertained of its beauty, from the following laudatory inscription:—

Bonna Solum felix, celebris locus, inclyta tellus
Florida martyrio, terra sacrata Deo—
Eulibus requies, asylum mite fuisti
Semper, et externi te reperere suam.

And, in 1583, the Emperor Charles the Fourth, when crowned here by the Elector Wallram, declared the town itself "was the brightest gem of his Imperial coronet."

In the same year, however, the marriage of Archbishop Gebhard (a) with the beautiful Agnes, Countess of Mansfield, gave rise to an unfortunate war, that lasted till 1589, during which period it was once more laid in ashes. But a phœnix it was, and a phœnix it remained; and about ten years afterwards we read of it again in some ancient German records, which, in chronicling its doings, assure us it was once more able to wave its pinions with the best eagles of the day, until swooped at and clutched by the kingly Bird of Prussia. In 1703, upwards of 1,000 men had been constantly employed for nearly eighteen months in strengthening its fortifications, and rendering them capable of withstanding a protracted siege. Notwithstanding, however, all that was done, the Dutch General Cöhorn (German Kuhhorn—*Anglice* Cowhorn) took it after a sharp bombardment of little more than six hours. The short struggle made in the defence of a position, then considered so strong, coupled with the name of the conquering General, gave rise to many a pointed epigram. From among these I select the following, which conveys the principal point of their satire:—

Es liess einst Josua die Feldtrompeten schallen,
Drauf mussten mit Gewalt in sieben Tagen fallen—
Die Mauren Jericho's.—Dies war ein Wunder! Doch
Das Wunderwerk mit Bonn, scheint etwas grösser noch.

Es wurde mit Gewalt der Hauptort überwunden,
In kurzer Tagefrist, und etlich wenig Stunden.
Kein Josua war da, der mit Trompeten bliess,
Es war ein *Kuhhorn* nur, das es zu Boden stiess.

Which may be thus translated:—

In seven days, Joshua, with the trumpet's sound,
Brought Jericho's proud ramparts to the ground;
This deed was, through all time, a wonder thought,
Yet, at the siege of Bonn, were greater wonders wrought.

Not in seven days, Bonn's strong and lofty wall,
But in seven hours, by force was doom'd to fall;
No Joshua there the trumpet's blast did blow—
'Twas a mere *Cow-horn* laid the city low.

From about the year 1795 to 1814, Bonn was in the hands of the French. Napoleon intended to have re-fortified the city; and, indeed, the measurement of the walls was actually taken by his engineers, but the idea was abandoned, as it was judged the neighbourhood of the Kreuzberg, from its elevated position, would entirely command the city. In 1814 the allied armies entered Bonn, and in 1818 it was annexed to the Rhenish provinces of Prussia, under whose government it still remains.

Bonn contains about 13,000 inhabitants, and though it still evinces considerable antiquity, it is nevertheless clean, compact, and lively. The fine and spacious electoral palace, now appropriated as a University for the provinces of the Rhine and Westphalia, stands upon elevated ground, the principal *façade* forming a most delightful amphitheatre, embracing a magnificent view of the river and the seven mountains; and towards the right, the Chateau of Poppelsdorf or Clemensruhe, together with its pretty village, and the chain of hills to Godesberg, including the Kreuzberg. The gardens in front are separated from the waters of the Rhine by the Coblenz road, and a delightful avenue of noble chesnuts, extending above a mile, leads on to Poppelsdorf. This forms one of the most inviting and fashionable promenades of the inhabitants.

Since its foundation in 1818, the University has attained considerable reputation. The King of Prussia, after the Congress of Aix-la-Chapelle, being desirous to commemorate the anniversary of the victory obtained by the coalition at Leipzig, issued a decree for the establishment of a College at Bonn, and detailed his views and wishes upon the subject to Prince Hartenberg. After expressing considerable anxiety to provide the means of diffusing the fundamental principle of real and useful knowledge among his subjects, he observes, "I do confidently hope that the University will ever act in the spirit which dictated its foundation, in promoting true piety, sound sense, and good morals. By this my faithful subjects may know and learn with what patriotic affection I view the equal, impartial, and solid instruction of them all, and how much I consider education the means of preventing those turbulent efforts and movements so injurious to the welfare of nations." The King allowed the palaces of Bonn and Poppelsdorf, together with all their appurtenances, to be dedicated to the establishment.

Although the students are numerous, amounting at times from 1000 to 1200, and bordering, as the University does, on countries whose religious persuasions are of so opposite a character, yet it affords a happy instance of the blending or union of religious with moral and philosophical instruction, and but few instances of religious animosity have arisen to interfere with the general objects of education. Nevertheless, Romanism, as well as Rationalism, will strive for its proselytes; and though open attacks are seldom heard of, the secret and subtle working of these two elements as often pervert the youthful mind, and lead many to abandon the pure and Scriptural faith, either for the cold and cruel system of a heartless and hopeless philosophy, or for the ancient superstition which casts mankind, bound in darkness and iron, at the feet of an Italian priest.

There are two theological faculties equal in rank, and also a Protestant and Romanist Professor of Philosophy, each of whom has his separate classes. The other faculties are *communis omnibus*.

From the size and extent of the original palace, it is capable of including not only the various branches of the University, but,—what is highly advantageous both to the Medical Professors as well as students,—the Surgical and Medical, together with the Lying-in Hospitals, under the same roof; and also the different theatres for lectures, and the collections necessary for illustration.

The plan of study pursued at Bonn by medical students is pretty nearly as follows. On quitting the school where he has received his education, he presents himself with his certificates at the University, from which in due course he obtains his doctor's degree.

For this, at least eight, and sometimes ten semesters are requisite, together with full testimonials of attendance at the lectures, &c. Every student is bound to apply himself to the three main branches of Medical Science. Those who spend four years at the University, generally hear lectures in the first five semesters, on Chemistry, Medicine, Botany, and Mineralogy; and, during the last three semesters, they frequent the clinics and the lectures in connexion with them, such as obstetric practice, surgical operations, and general medical treatment. Many students, however, not satisfied with this, or fearing to undergo their examination, which, as far as theory goes, is pretty severe, remain another semester or two, and select such lectures as they deem most advantageous to their own particular case.

The control exercised not being very strict, many lectures, especially in the first semester, are either neglected, or very heedlessly attended—a system which cannot be too strongly censured.

The terms being finished, and particular conditions fulfilled, the student must undergo three examinations. First, in physics and philosophy, which he must undergo in the fifth semester; and secondly, that for his doctor's degree, which latter combines every branch of Medical Science. Having passed through these ordeals, it might be supposed he would be allowed to practise, but this is not the case. He must then go up for the third or Staats-examen, either to Berlin or some chief provincial town. (a) And even then his trials are not over.

In Germany, all appointments, from the Chancellor to the chimney-sweeper, are in the hands of the Government from whom they more or less directly emanate; and thus it is, (no professional man, tradesman, nor artisan, being free to practise where he pleases,) the poor student, after his three examinations, which are made as difficult as possible, must await his turn for an appointment, ere he can take one step towards establishing himself. It unfortunately happens, that there are, in every profession, trade, and art, more candidates than places; therefore, the professional man must fold his hands and abide his time; and the artisan must travel; and the wretchedly-paid schoolmaster may stay at home and starve, quietly if he please, ere they can receive the Royal permission to exercise their respective callings; and, as regards medical students, I have known some who have waited from six to eight years, from the time of their examination, before they obtained the mandate, which wrote them free to practise the Profession for which they had so laboriously qualified themselves.

In speaking of the opportunities of study afforded to the medical student at Bonn, it is scarcely necessary to remark, that the medical, surgical, and obstetric clinics, though in the same building, are distinct from each other. Connected with these is the Poli-clinic, where the poor of the town are attended by the Directors and their assistant-physicians. The number of patients attended in the medical clinic amounts to about 60, of whom 10 are children. For the latter, Professor Nasse has arranged a small room. These patients are committed, under

(a) This was the celebrated Gebhard Truchsess, who was deposed from his see at this time because he had become Protestant.

(a) That for Bonn and the Rhenish provinces is Coblenz.

proper inspectors and control, to the students who frequent the clinics. Every student reports upon the diagnosis, prognosis, and treatment of the disease; and this report is laid before the Director, who either himself visits the patient, or sends one of his assistants, as the case may require. Every change of treatment is expected to be proposed by the student, and submitted to the Director, who then discusses with him the nature of the disease, its various symptoms, and means of cure. This arrangement has been found to work well, and tend greatly to promote the advancement of the pupils.

The surgical clinic is arranged similarly to the medical, and is equally in the hands of skilful Directors and their assistants. The operations are proposed and described by the students, but are performed by the Director, except the minor ones. If, however, a student "comes out," and, by his dexterity upon the dead subject, shows himself capable of performing operations, he is allowed to operate upon the patients, under the superintendence of the Director. The dressing is performed by the students alone, under the immediate inspection of the chief assistant. As there are but few skilful operators in the inland towns, there is no want of important cases in the surgical clinic.

The obstetric clinic generally comprises about 15 to 25 cases, pregnant and lying-in. These also are committed to the care of the more advanced students, who are obliged to submit, from time to time, an elaborate report of whatever symptoms they may have observed during the pregnancy, the nature of the presentation and birth, and the child-bed treatment.

Before the student is allowed to frequent the clinics, he must have attended lectures on special pathology and therapeutics, as well as a preparatory class.

In the Poli-clinic, an Institute certainly of the greatest value for beginners, every student, after having practised one semester in the clinic, and having acquired the good opinion and confidence of his Director, gets appointed to attend one or more patients, as the case may be; and it being obviously impossible for the Director to accompany the students daily in their visits, this duty is assigned to the assistants already mentioned. These see the patient as often as is deemed requisite, and consult with the student upon the symptoms and mode of cure,—recourse being had to the Director himself, who also attends upon all doubtful or important cases. When this is not requisite, he is furnished, as in the before-mentioned instances, with a *daily report* of the diagnosis, prognosis, treatment, &c., of the patient; besides which, certain hours in every week are appointed for a general report, and the reception of all the visiting students, when interesting cases are noticed and remarked upon, and much instruction and improvement thereby afforded. This clinic is never without a considerable number of patients; for, on account of the skill of its Professors, not only the poor, but the wealthy, resort to it,—the latter, of course, paying a stipulated sum for the attendance and medicines.

Of Professors at Bonn, we may mention the ten principal ones as connected with the Medical School. These are—Christian Harless, D. Mayer, Frederic Nasse, Ernest Bischoff, Ernest Moritz Nauman, C. J. Wutzer, M. Kilian, Ignatz Weber, Frederic Albers, and Julius Budge.

The first has been at Bonn ever since the foundation of the University in 1818. He was formerly at Erlangen, and directed the clinic before Nasse was called hither from Halle. He is a very learned philologist, and possesses considerable attainments in pathology and therapeutics. At present he reads only on the history of medicine and medical jurisprudence.

Mayer is Professor of Anatomy and Physiology, and, like Harless, dates from the foundation of the University. He was formerly at Berlin, and has written some excellent books on Anatomy and Physiology.

Frederic Nasse, who now so ably directs the Medical Clinic, has been at Bonn ever since 1819. He was formerly at Halle, and was invited hither on account of his eminent talents. He lectures on General and Special Pathology, Therapeutics, and especially on diseases of the mind. His manner is lively and prepossessing, and he goes heart and soul into his subject; this attracts and inspires his hearers, and his lectures are well attended. Nasse lets nothing escape him; neither does he fail to communicate to his pupils all that he himself possesses. His library abounds in the best Medical literature, both new and old, German, French, and English, and this is always at the service of his pupils.

Ernest Bischoff—The author of a very extensive and valuable work on Pharmaceutics, and lectures well on Materia Medica and Medical Jurisprudence. He is of about thirty years' standing at this University, which speaks enough for his reputation as a professor.

E. M. Nauman—The lecturer on General and Special Pathology,—a learned, sagacious, and indefatigable man; a good lecturer, and well followed.

C. J. Wutzer was called hither from Münster, in 1821, where he was formerly chief surgeon. He directs the surgical clinic, is principal demonstrator, and delivers lectures on Anatomy and Surgery. He is a cautious and skilful operator, and greatly distinguished by his profound anatomical knowledge. Perhaps no surgeon has given more attention than Wutzer to diseases of the bladder, or with more success.

Kilian has been at Bonn, from the year 1828. He is a clever accoucheur, and has the superintendence of the Maternité. His lectures on the Diseases of Women, as well as on Obstetric Operations, are highly instructive.

Ignatz Weber was first installed here as Anatomical Professor, and is well read and of good reputation.

F. Albers is Professor Extraordinary,—a very active-minded man, and distinguished by great scientific research.

J. Budge, also Professor Extraordinary, reads on Physiology and General Anatomy, and gives courses on Microscopic Chemistry and Pathology; a clever man, whose comprehensive views are acknowledged by all.

The University of Bonn, though not so much frequented as that of the Prussian capital, is, nevertheless, capable of affording an excellent education, and on very reasonable terms,—the expenses need not exceed sixty guineas per annum, *inclusive* of fees, which amount to about 20*l*. As regards the *Medical courses*, they vary according to circumstances; none, however, are less than twelve, or more than twenty-four florins. Living and lodging cost a quiet friend of ours, as student, about a fifth more, for one year, than at Würzburg.

At Poppelsdorf, close to Bonn, there are cabinets of Natural History, lecture-rooms, apartments for the Professors, and an extensive botanical garden of, at least, twenty acres, beautifully situated and admirably kept, where the student is afforded every facility for the prosecution of his studies. The Zoological collection consists of nearly 17,000 specimens, and there are also about 11,000 fossils. The Cabinet of Minerals, to which, also, the students have free access, exemplifies, in a most interesting degree, the mineralogical history of the Rhine and its environs. The public is indebted for this beautiful collection, comprehending nearly 23,000 specimens, to the indefatigable research of Professor Nöggerath, who was occupied upwards of twenty years in forming it.

Bonn forms, as we have already intimated, a very agreeable place of residence—nor do I know of any town in which a student might pass his time more agreeably, or, all things considered, with more profit. He would not be exposed to those open and vicious examples which infest so many of the larger towns. The surrounding country offers walks and prospects of varied and delightful character. Amongst these the Kreuzberg and the Godesberg, Gottesberg, or God's-hill, deserve to be particularly mentioned. On the summit of the former was an ancient monastery of the Servites; it is now destroyed, and a beautiful chapel has been substituted, highly ornamented with paintings and Italian marble. The prospect from hence is extensive, and almost sublime. On the east and north-east, a semicircle of hanging woods projects towards the Rhine, on the opposite banks of which the bold, wild, and romantic Siebengebierg, or Seven Hills, with their luxuriant woods and vines, rear, in proud pre-eminence, their lofty heads. Towards Bonn the view assumes a varied and majestic character. The eye, after surveying the whole city, and its delightful environs, is carried into a beautiful and picturesque expanse of hill, plain, green woods, and spreading pastures, stretching away to an immense distance in the direction of Brühl and Cologne, until it fades in the distant horizon.

The next interesting points in the vicinity of Bonn is Godesberg, and the pretty village of Dmitsch. The hill is surrounded by the ruins of a castle, portions of which still present vestiges of Roman architecture. The remnant of the tower is about ninety-five feet high, from whence is also procured an imposing and extensive view. But these are not all—the neighbourhood abounds in beauties of every character; and he who, after hours of severe application and study, cannot find relaxation and enjoyment, and derive new vigour for fresh exertion, amidst the scenes of loveliness which Nature here so profusely unfolds to him, can have no rightly attuned heart, and loses one of the highest and purest delights which God, in his mercy, has provided for man.

Society in Bonn is upon a pleasant and agreeable footing, and access to it not difficult. A few letters to resident families, as well as to the Professors, is desirable, though, if a young man's character be good, and his manners quiet and respectable, he will not fail to make his own way, in this particular, through the families of the Professors themselves, with whom he may soon become acquainted. There are at Bonn, on an average, about 700 to 800 students, but the number of medical pupils has of late years varied greatly.

Bonn will be remembered by many readers in connexion with the names of Niebuhr and Schlegel, and also as the birth-place of Beethoven, whose house stands in the Rhein Strasse, and a monument to his memory in the market-place.

As to the amusements of Bonn, besides those afforded in private society, there is no dearth of music, for it has its academy of this science, and concerts are pretty frequent. Balls are given plentifully enough in the season. There is a good Museum and a Library of at least 100,000 volumes. I do not believe human requirement, however capricious, need go beyond all this for its extremest gratification, and I cordially recommend Bonn both as an University town, and an agreeable place of abode; and so farewell awhile to Bonn, "*la petite perle*," and farewell to its still more beautiful and glorious setting. I hope, however, to see both again, and to meet some of my readers there also.

7, Nottingham-place, Regent's-park,
June, 1850.

CASE OF PLACENTA PRÆVIA.

By CHARLES WALLER, M.D., Obstetric Physician to St. Thomas's Hospital.

The case about to be narrated was under the immediate superintendence of my friend and neighbour, Mr. Elwin, whom I met in consultation on the morning of April 14th, and from whom I received the subjoined particulars:—

Case 86th.—Mrs. Q., aged 31, was delivered of a still-born seven-months fœtus in January, 1849. The catamenia appeared regularly afterwards for nine months. On the 2nd of October she was unwell as usual, but after that period the menses were suppressed. On the 2nd of January, 1850, a considerable gush of blood took place, and again on the 2nd of April. On both these occasions the discharge soon ceased. On the 14th of April, Mr. Elwin was suddenly summoned to his patient, great alarm having been excited by the loss of a large quantity of blood. A vaginal examination was made, but nothing abnormal was detected, as the os uteri had not begun to dilate; indeed, to use Mr. Elwin's own expression, it was "firmly closed" The recumbent position was strictly enjoined, notwithstanding which, however, the flow did not entirely cease, although it was greatly checked. On the 20th of April, at two o'clock in the morning, very copious hæmorrhage again supervened; the os uteri

was beginning to dilate. A careful examination was then made; the membranous bag was felt protruding posteriorly, and a considerable portion of the placenta hanging down anteriorly. At four o'clock the dilatation was sufficient to allow of the introduction of two fingers within the os. The membranes were ruptured in the attempt to discover the presentation. The discharge of blood, however, continued. At six o'clock I was requested to meet Mr. Elwin. The os uteri was, at this time, about half open, and the surrounding portion still rigid. As there was room for the introduction of my hand, we determined to deliver at once by turning the child, and then completing the work of dilatation by the gradual pressure of the child's head. The head presented, version was easily accomplished: there was some little difficulty in bringing the head down, in consequence of the resistance of the undilated ring of the os uteri. This was gradually overcome, and a dead fœtus abstracted. In cases of partial placental presentation, I should, as a general rule, proceed upon the plan adopted in this case. As the hand can be easily introduced at once into the uterus, the child may be removed with as little, or perhaps less, difficulty than would be experienced in the entire separation of the placenta. My confidence in Professor Simpson's plan in those cases, described in former numbers of your Journal, remains unshaken. It will be seen, on reference to those cases, that in nine instances the placenta was separated, either naturally or artificially, before the birth of the child. The same effect was produced in all; namely, the cessation of the hæmorrhage, and eight of these women recovered. Surely this result could not have been accidental, as some would have us imagine. I am not aware that any cases have been recorded wherein hæmorrhage has continued after complete separation.

I always anticipate practical and fair statements from our Professional brethren on the other side of the Channel, and was therefore somewhat surprised in reading the chapter on Placenta Prævia, in the last edition of Dr. Churchill's "Midwifery," to find that he quotes the opinion of only two of our metropolitan accoucheurs on this very important subject, and these two, let it be remembered, entertain the same views as have been expressed by himself; and I believe I am correct in asserting, that the objections expressed by them are purely theoretical, as they have never tested the practice at the bedside of the patient.

Finsbury-square, June 4, 1850.

OBSERVATIONS ON TRANCE, OR HUMAN HYBERNATION.

By JAMES BRAID, Esq., M.R.C.S., Edinburgh, &c. &c.

ADDENDA.

(Continued from page 408.)

The term *hybernation* has been adopted to designate that peculiar state of torpor or profound sleep into which some warm-blooded as well as cold-blooded animals are liable periodically to fall, and to which it seems as natural and regular in its access as common sleep is to all other creatures. They generally pass into this condition in autumn, and continue in it, entirely without food, during the winter months; hence the designation, *hybernation*, or winter sleep.

It seems quite obvious that temperature plays an important part in relation to this condition; for it has been proved that hybernation may be prevented by keeping these creatures in an artificially elevated temperature; and, even when they have passed into the state, that they may be aroused from it, at any time, by *artificial* heat, as well as by the genial warmth of spring.

In warm-blooded animals which hybernate completely, such as the marmot, the power of generating heat is so feeble, that the temperature of their bodies follows pretty nearly that of the surrounding air; so that, at a temperature a little below the freezing point, the thermometer placed within the body falls to 35°, and may remain at this point for some time, without apparent injury to the animal, as it recovers when subjected to a higher temperature. It is thus obvious, that the vital properties of the tissues had been preserved during this state of arrest or depression of their usual vital activity; but when long subjected to a much more intense degree of cold, it has been found that there is not merely a temporary suspension of activity, but that total loss of life is the result.

During hybernation all the vital functions are proportionably depressed below the natural standard. The pulse is reduced to one-tenth its usual number of beats, and the breathing to about one-thirtieth the number of respirations, whilst it is accomplished with very little perceptible heaving or enlargement of the chest. Now the activity of respiration and quantity of carbonic acid gas eliminated in a given time being the surest test of the general activity with which the vital functions are progressing, it thus becomes obvious that they must all be greatly depressed during this condition; and that, consequently, the disintegration and waste of tissue must be going on at a very slow rate compared with that of the normal active condition. Such is actually found to be the case, and, consequently, these creatures, when in that state, can subsist for a great length of time without food, merely consuming a portion of their own tissues, and that at a very slow rate. They are thus enabled to live without food for a period far beyond what could possibly happen with them during the active state of their existence.

When in an *intense* state of hybernation, moreover, sensibility is so depressed as seems completely to lock up all the senses; but, when in a less intense degree, there is merely diminished sensibility.

Even in the cold-blooded animals, the activity of the functions and demand for oxygen are less at low than at higher temperatures, as has been beautifully shown by the experiments of Dr. Edwards. Thus, during winter, as I have myself frequently witnessed, frogs can live and move under the ice without the necessity of coming to the surface to breathe, the aërated water surrounding their bodies being sufficient to produce that change on their blood through the skin, requisite to sustain the demands of their feeble life at that low temperature; but, when the season advances, with the increased temperature the activity of the animal ensues, when it becomes indispensable that it shall be permitted to come to the surface to breathe occasionally; and if prevented from doing so after the heat has become considerable, the creature speedily dies. As remarked by Dr. Carpenter, page 369 of his "Manual of Physiology:"—"When the temperature of the reptile is raised, by external heat, to the level of that of the mammal, its need for respiration increases, owing to the augmented waste of its tissues. When, on the other hand, the warm-blooded mammal is reduced, in the state of hybernation, to the level of the cold-blooded reptile, the waste of its tissues diminishes to such an extent, as to require but a very small exertion of the respiratory process to get rid of the carbonic acid, which is one of its chief products."

As the tear and wear of the tissues, then, and consequent demand for food to supply this waste, are in exact ratio with the activity of the vital functions; and as we have seen these are so wonderfully depressed during complete hybernation, as to enable the creatures to subsist *for many months* on their own tissues, *entirely without food*, with a pulse at one-tenth its usual number of beats, and respiration reduced to one-thirtieth its usual frequency, both of which being still cognisable to the human senses, we need be the less surprised that the Fakeer, who has acquired the power, by artificial contrivance and *long training as a religious exercise*, of throwing himself into such an intense state of hybernation, or trance, that neither the beating of the pulse nor of the heart, nor the process of respiration can be detected by the nicest scrutiny, should be enabled to subsist without food several days, or even for six weeks, as has been represented to have happened in the case narrated by Sir Claude Martin Wade. Still, there must, of necessity, be a limit to this state of abstinence, even during the state of human hybernation, as the available supply of fat and other tissues, would at length become exhausted, when death must inevitably ensue, if not warded off by a suitable supply of food in due time. Whilst we may readily believe it possible, therefore, for the Fakeer to have existed in the state of trance or human hybernation, for the space of six weeks without food, the allegation of the Chowdrie to my friend the major, that the individual to whom he referred would be perfectly safe and certain to recover, were he to be left in the condition for twelve months, or for *a hundred years*, must be looked upon as a mere fiction of his fervid imagination and unbounded religious faith. All hybernating animals, however corpulent they may have been when they passed into the state of hybernation, are found to be quite emaciated when they come out of it; and we have no reason to suppose that it could be otherwise with man, when placed under similar circumstances.

Perhaps there could not be a more interesting proof adduced in point, as regards the relation which subsists between the amount of tear and wear of tissue in a given time, and the degree of vital activity, than was afforded in the experiment with the humble bee, which is recorded to have eliminated more carbonic acid in *one* hour, when in a state of excitement, incident to its recent capture, than it did in *twenty-four* hours subsequently, when in a state of quiescence. This experiment, moreover, proves, that as great a degree of increase in waste of tissue in a given time may result from excessive excitement and muscular effort beyond that of a state of ordinary repose, as this latter exceeds that more profound repose and inactivity realised during complete hybernation.

Moreover, we have remarkable instances of protracted fasting during disease. Thus, Macnish, in his chapter on Protracted Sleep, cites an instance of a patient who remained *eight* days without food or drink; and of another who, on one occasion, "*slept three weeks*," and who, during that period, "took not a particle of either food or drink; nothing could arouse him, even for a moment; yet his sleep seemed to be calm and natural!" In his chapter on Catalepsy, also, he refers to the case of a Polish soldier, who fell into that condition from terror, and who remained for *twenty days* without nourishment.

About twenty years ago my friend Dr. Jarrold, of this city, attended a gentleman forty-four years of age, who fell into a state of trance, in which he continued for a whole week. During this period the Doctor watched him closely, and informs me that the vital processes were reduced to such a low ebb, that he had no expectation of his patient's recovery; the pulse being scarcely perceptible, and the respiration faint, and repeated only about *once in three-quarters of a minute*. After continuing in this state for *a week*, without swallowing a particle of food or drink, he awoke from his trance, and called for *beef-steaks*, of which the Doctor had the pleasure of seeing him make a hearty meal. He recovered from this affection, and lived a year thereafter, when he died from a different disease.

But again, besides the brown and polar bears, which are well-known to sleep profoundly and without food for many months every winter like other hybernating animals, we have instances in our own country of sheep surviving for several weeks under wreaths of snow, when entirely deprived of food; and the fat pig recorded by Martell as having been overwhelmed by a slip of earth, is a still more remarkable instance in point, as it lived in this situation 160 days without food, and was found to have diminished in weight in that time 120 lbs.; being, as well observed by Dr. Lion Playfair, "an instance quite analogous to the state of hybernation."

I am well aware that there were individuals in this country, as well as elsewhere, who hastily published observations, from limited data, pronouncing the whole of these feats of the Fakeers as mere Hindoo tricks; and, consequently, who will now feel themselves bound, in self-defence, to stand by their former verdicts. I know human nature too well to expect to extort a confession of conviction to the contrary from such individuals, by any amount of evidence which could possibly be adduced, even if they were permitted to be eye-witnesses of the facts themselves. To all unprejudiced persons, however, possessed of minds capable of weighing the force of evidence, I think the original proof which I have been enabled to bring forward in addition to what we formerly possessed on the subject, must be sufficient to prove the *bond fide* nature of some of these feats of the Fakeers, and, consequently, that human hybernation (or a state analogous to that of hyber-

nation in the lower animals) is a physiological fact, and is capable of being induced by artificial contrivance, as well as of occurring spontaneously occasionally in the condition designated *catalepsy* or *trance*.

Arlington House, Oxford-street,
Manchester, May, 1850.

HOSPITAL REPORTS.

KING'S COLLEGE HOSPITAL.

LIGATURE OF FEMORAL ARTERY.

In former years, ligature of the femoral artery, for the cure of popliteal aneurism, was an operation of not unfrequent occurrence; but in these days it is a rare thing to see this vessel tied, as the treatment of the disease by well-adapted and continued pressure on the artery above—for which the Profession is much indebted to the Surgeons of Dublin—has been found to be so eminently effectual, and is now resorted to by many surgeons who, a few years ago, would have used the knife. Cases will every now and then occur in which, if tried, pressure will not answer, or in which it is deemed inexpedient to resort to this method of cure, and, in such, it will be necessary to put a ligature on the artery above, as practised by Hunter.

We had the opportunity of seeing Mr. Partridge tie the femoral artery, on Saturday last, at this hospital. Pressure had not been previously tried here, as Mr. Partridge did not consider the patient a good subject for it. He was an unhealthy man, and his capillary circulation appeared to be weak. The man was about thirty-five years of age, and his employment was that of a skin-dresser, and he was obliged to use "his lower limbs" very much in stamping upon the skins. About a year ago he first noticed the symptoms of the aneurism, which were, a weakness in the limb, and pain in the bam after much exercise. He was admitted into the hospital about a fortnight ago, when an aneurism about the size of an orange was discovered; his health was not good. He had been a dissipated fellow; but, on careful examination, there appeared to be no organic disease but that for which he was admitted. Mr. Partridge therefore determined to tie the femoral artery. The operator commenced by making an incision between three and four inches in length, in the centre of the upper part of the thigh. (Scarpa's triangle.) The tissues beneath were then cautiously cut through, until the sheath of the vessels was exposed; this was very cautiously opened, the vessel was isolated to a small extent, and the ligature was applied from within outwards with the greatest facility. There was no difficulty whatever in the various steps of the operation. None of the small superficial vessels were divided, consequently there was no bleeding to obstruct the view of the parts which were to be divided.

ULCER OF THE LEG OF FORTY YEARS' STANDING.—AMPUTATION.

Some years ago it was not an uncommon thing for the surgeon to amputate a limb for simple disease of the soft parts alone which was not amenable to the remedies then used. Of late years, however, the treatment of ulcers of the lower extremities has been so thoroughly improved, that it is not very often that we see even a very extensive ulcer intractable to the means employed, if the patients at least will undergo the confinement which is necessary for their cure. A case, however, will every now and then be met with in the London Hospitals which appears to defy every known method of cure, either in consequence of the vast extent and duration of the sore, or from some peculiar condition of the constitution of the patient, or from both these causes combined. Within the last few years we have observed two or three such cases, in which amputation of the limb was performed; and there is at present a patient under Mr. Fergusson in this hospital who has undergone this operation for the removal of an ulcer. The patient is a female, upwards of sixty years of age, who had suffered with a large ulcer on the left leg for forty years. It has never healed up. She had been the inmate of several hospitals, and the proposition had been made to her, that she should lose her limb, but she would not consent. A short time ago she was admitted into the hospital. There was an enormous ulcer of the lower third of the left leg, and involving the foot, which appeared to be rendered useless, in consequence of the immense thickening of the tissues in the neighbourhood of the ulcer. Besides this, when she first came in, there was a large slough on the hinder part of the heel. Mr. Fergusson viewed the case in the same light with the surgeons of the hospitals the patient had been previously an inmate of, and stated to her that there was no other remedy but amputation. The woman consented, and on Saturday she was brought into the theatre, and amputation was performed in the middle third of the leg. Mr. Fergusson performed the operation in his usual manner, namely, by first drawing the knife from heel to point, in a somewhat curved direction, over the front of the limb, and then transfixing it and forming a long flap from the muscles behind. This is certainly a far preferable method to the plan sometimes used of transfixing the limb first, and then making the anterior cut.

Mr. Fergusson explained to the students the reason why he had performed this operation merely for an ulcer of the leg. He considered it to be the best thing for the poor woman, under the circumstances, for this large ulcer, which had existed for near forty years, would never heal; and it was a constant source of annoyance to the patient, and she had been frequently urged to have the limb removed, to which she would not consent; and, although her age was now advanced, and it was not always a wise thing to check a discharge which has existed for years, through the means of an ulcerated surface, he deemed it the best thing for the patient to undergo the operation.

TALIACOTIAN OPERATION.

Our readers will remember that, a few weeks ago, we reported the case of a patient of Mr. Fergusson's, who had undergone this operation. The poor fellow afterwards had a most severe attack of erysipelas, followed by a condition resembling mania, for which it was found necessary to use restraint, and he was transferred to the care of Dr. Todd, under whose judicious management the patient recovered; and although in the wild delirious attacks the new nose underwent many perils and dangers, in consequence of the attempts of the patient to pull off what Mr. Fergusson had taken so much trouble to fashion, fortunately almost complete adhesion of the cut surfaces on each side took place; and although the organ was somewhat more prominent than Nature would have formed for him, the patient went out a much more handsome fellow than he was when he was first admitted.

This man returned, a few days ago, to have some additional touches of the knife, to make his nose more perfect; for, although union had taken place most effectually on either side, to the extent of three-fourths of the wound, just below the upper angle, on either side, there was a want of adhesion, so that a probe could be passed through. Mr. Fergusson, therefore, before taking any ulterior steps to perfect his work, determined first to pare the edges on either side of that portion of the nose which had not united. This he did with great care, and also separated the commissure of skin which bound the nose to the forehead; he then replaced the now raw surfaces by means of sutures, and thus put the parts into proper adaptation for union to occur. We hope that the patient will this time escape the severe results of the previous operation, for we have little doubt that he will ultimately be able to present a very fair specimen of the handiwork of the surgeon in making new noses.

CHARING-CROSS HOSPITAL.

REMOVAL OF A MALIGNANT TUMOUR IN THE SITUATION OF THE PAROTID GLAND.

The subject of the present outline was a man, aged 50, who had enjoyed very good general health up to the present time, and in whom no hereditary tendency to malignant or other disease could be traced. It was not until four or five months ago that he first noticed a small lump, the size of a pea, behind the left jaw-bone; but, as it caused him no pain or inconvenience, he did not take particular notice of it. After this it grew rapidly, and he has lately had sharp, shooting pains up the temple of the same side. On his admission the tumour, situated between the mastoid process and the ramus of the jaw, was about the size of a walnut, not tender, and free from pain, though that in the temple still continued. The skin covering the swelling was freely moveable and healthy. The tumour appeared to be bound down by the fascia, which prevented more than the slightest motion.

The patient having been placed under the influence of chloroform and the part shaved, the operation was very ably done by Mr. Avery, as follows:—A vertical incision being first made, an inch and a half in length, equi-distant from the jaw and mastoid process, another was carried forwards from its centre on to the cheek. On dissecting back the integument, a round, hard, nodulated tumour was seen lying beneath the fascia, and either imbedded in or forming part of the parotid gland. It was carefully separated from its connexions with the surrounding tissues, a ligature being passed through it towards the latter part of the operation, so as to hold it more firmly. There was not much difficulty in the removal of the tumour. Its surface, though nodulated, was not rough at any part, which it would have been had any portion been left behind. The man, for several weeks, had suffered from paralysis of the left side of the face, either through pressure of the mass upon the trunk of the nerve, or from its being involved in the diseased mass. The former is most probable, as, on his return to bed, we noticed that he was able to close the left eye, and, also, that the face was somewhat less drawn to the opposite side. While the man was insensible from the chloroform, a peculiar stertorous noise was made, chiefly by the flapping of the cheek consequent on the paralysis. The left eye remained unclosed, the right closed.

Mr. Avery considered that the disease removed was similar in character to a chronic mammary tumour, to which it presented some points of general resemblance, though it had, to some extent, a malignant aspect. He had seen other tumours in this position, not unlike this one, in the interior of which were found small portions of bone or cartilage.

There can be no doubt that many of the so-called cases of extirpation of the parotid gland are in reality nothing more than removals of glands, one of which is always found lying on the parotid, opposite to the bifurcation of the external carotid into the temporal and maxillary arteries, and another beneath the lobe. These are not unfrequently diseased. This opinion was long ago expressed by Allan Burns in his "Surgical Anatomy of the Head and Neck," page 267, where he says, "The salivary glands are very rarely swelled, the lymphatic ones frequently;" and again, "Those who assert that they have extirpated the parotid gland, have, I am fully convinced, mistaken that little conglobate gland which lies imbedded in its substance, and which does sometimes enlarge, producing a tumour in many respects resembling diseased parotid, for the parotid itself." Mr. Cruikshank also mentions, that he has known the glands about the parotid "indurated and enlarged to the size of a hen's egg, which gave suspicion of a cancerous affection of the parotid itself." We think it is probable that Mr. Avery's case was one of malignant disease of such a gland; we say malignant, because under the microscope it presented those characters which are known to belong to growths of this kind.

ROYAL FREE HOSPITAL.

STRICTURE.—PUNCTURE OF THE BLADDER FROM THE RECTUM.

Whatever may be the merits or demerits of Mr. Syme's proposal for cutting down on a stricture which is still permeable to instruments, is a point we are not going to discuss here. His work, however, has the merit of having called the active attention of the Profession to this disease, and it is with a view of contributing something to the general stock of information on this subject that we publish the following case:—

Two or three weeks ago a patient was admitted

into the Royal Free Hospital, labouring under retention of urine. He was suffering extremely, and described himself as having laboured under stricture for years. He had drunk very freely on the preceding evening, and had passed no water since. Here, then, as in very many of these cases, a spasmodic stricture, induced by a sudden fit of debauchery, was superadded to a permanent stricture of long standing. After a long, continued, and careful attempt to pass the smallest catheter, Mr. Jackson, the house-surgeon, was obliged to send for Mr. Gay, who, after consultation with Mr. T. H. Wakley, pronounced the stricture to be impermeable, and proceeded to puncture the bladder from the rectum. This was done with little difficulty, and with relief to the immediate symptoms.

The patient was ordered doses of sulphate of magnesia, with tartar emetic and opium, every three hours, and hot fomentations over the bladder and to the perinæum. He immediately fell asleep, and remained so until the evening; the bowels were freely relieved, and on the first recurrence of desire to micturate, the patient passed his water in a tolerably good stream through the urethra. In a day or two he become an out-patient.

STRABISMUS—DIVISION OF THE RECTUS BY MEANS OF LANE'S KNIFE (MADE BY SAVIGNY.)

Every improvement in surgery is interesting, and we eagerly seized the opportunity afforded us by the kindness of Mr. Gay, of seeing this instrument used. It is a small curved bistoury, with a partially blunt point. The patient was a little girl. Placed under the influence of chloroform, Mr. Gay, having fixed the eye, introduced the knife by the under side of the rectus, and, holding it flat, passed it vertically on. Owing to its peculiar construction, it went close under the tendon, the point becoming prominent on the other side. On this the operator placed his finger, turning the knife up, when it cut its way out. A second touch of the knife was required, whereupon the globe of the eye instantly resumed its normal position. As nothing can be more simple than this instrument, we sincerely wish to see it tried still further. Its advantages, we are given to understand, are, that from its construction its point will pass through all the textures external to the sclerotic, but that no force can make it penetrate this membrane.

PROGRESS OF MEDICAL SCIENCE.

FRANCE.

[Paris Correspondence.]

DR. SIMPSON'S VISIT TO THE CONTINENT.

I have to express my regret, that some innocent *badinage* touching Dr. Simpson's visit to the Continent and the Parisian Medical Society should have brought about your ears such a storm of reclamation, and on me so much reproof. But our northern neighbours, I suppose, are too scientific to understand a joke. The remarks of your correspondent, however, have afforded an opportunity of letting the world know that chloroform is making rapid progress in Germany, France, Belgium, and Holland. This, at least, is a compensation; although, to the friends of Professor Simpson, it might have been more agreeable to think that his visit was connected with the diffusion of knowledge—an object of which no one need be ashamed—rather than the restoration of shattered health. But "enough ado about nothing." Had I been aware that our friend was so excessively thin-skinned, I should assuredly have avoided all contact with such a sensitive membrane.

CHLOROFORM AND ETHER.

Apropos of chloroform I may mention, that M. Simonin, Surgeon to the Hospital of Nancy, has recently published a large work, intended to illustrate the effects of ether and chloroform. Seventy-one cases in which these agents were employed by him are given in detail, and furnish the basis of his conclusions. An excellent chapter is devoted to a consideration of the local use of the two anæsthetics. They were applied to the mucous membrane, certain parts of the skin, the nerves, and the surface of recent wounds. Some of M. Simonin's conclusions seem novel and worthy of notice. He states that the insensibility of the skin commences at the extreme points of the body, and gradually spreads towards the centres. Thus the skin of the hands and feet becomes insensible several seconds, or even minutes, before the skin covering the forehead and temporal regions.

The different regions, again, are less susceptible of the influence of the anæsthetic agents in proportion as they are deep-seated. As to the local action, M. Simonin remarks, that when a part of the body covered with its epidermis is immersed for forty minutes in ether, or for twenty-five minutes in chloroform, sufficient insensibility is not produced to admit of a slight operation being performed without pain. On the other hand, when a stream of etherous vapour was directed for twelve minutes on the surface of a recent wound, perfect local insensibility was the result, although the system remained unaffected. The day, perhaps, may not be far off, when we shall be able to suspend the sensibility of the nervous chords, without acting on the centre of the nervous system, just as we are enabled to suspend circulation in an artery without acting on the heart. This would be the crowning work of etherisation.

GUTTA PERCHA BOUGIES.

M. Civiale read a report at a late meeting of the Institut on those instruments, which are now manufactured with great perfection by M. Cabirol, of this city. M. Civiale thinks them calculated, in many cases, to afford very great advantages, but is far from concluding that they should supersede the old bougies in every instance. For example, the soft wax bougie is the best instrument which can be employed for the cure of ordinary stricture. Its introduction gives no pain, and the model of the stricture which it furnishes is a most useful guide to the practitioner.

Again, when the stricture is very hard, and the prostate diseased, gutta percha bougies are not solid enough to overcome the obstacles. With these, and a few other exceptions, however, the new instruments may be adopted with great safety and success.

NEW PRACTICE IN CASES OF DISTORTED PELVIS.

The majority of French accoucheurs, as is well known, do not adopt our English doctrine, that we have a right to sacrifice the life of the child for the sake of saving the life of its mother. Hence, in cases of distorted pelvis, they usually have recourse to premature delivery, or, as M. Depoul advises, endeavour to arrest the development of the fœtus. M. Delfrayssé proposes a new mode of attaining this latter object. He administers iodine to the mother during the last two months of pregnancy, and thus arrests the growth of the fœtus. The following is the formula employed.

℞ Iodine, 9j.; ioduret of potassium, 9ij.; distilled water, ℥j. Six or eight drops to be taken every day in an ounce of any bland fluid.

The two following cases, illustrative of the effects of this practice, may be worthy of record:—

"A lady, whose pelvis was deformed, the antero-posterior diameter of the outlet measuring three inches only, had lost several children during delivery. The last was prematurely delivered at the age of seven months, and died a few minutes afterwards. Under these circumstances, M. Delfrayssé resolved on making a trial of the iodine. It was given every day during the last two months of gestation, and under its influence the lady was twice delivered at the full period without the slightest difficulty. The children were healthy and vigorous, though not larger or heavier than the child expelled at seven months. One weighed 22½ ounces less than the first children born of the same parent; the other weighed 23½ ounces less.

The second case was also one of deformed pelvis, having previously given rise to several difficult labours, during which all the children were lost. The patient having become pregnant for the sixth time, was treated in the manner described above; the child was born, at the full period, strong and healthy, though weighing three pounds and a half less than any of the former children. No artificial means were employed. The child is now well, and strongly constituted."

This practice appears to be rational, and worthy of imitation. It can hardly be imagined, that the arrest of growth and consequent facility of delivery were merely accidental coincidences.

POISONING WITH ZINC.

The highly injurious effects produced by the white lead employed in the manufacture of paints, have given rise to many efforts to obtain a substitute for that metal. After many unsuccessful attempts, M. Leclaire at length found a means of employing the oxide of zinc instead of lead, and the reports of several Medical Practitioners seemed to prove, that the use of zinc in manufactories was unattended with any baneful effect on the health of the workmen employed. Susbequent experience, however, has modified this opinion; and it appears to be demonstrated that zinc, like lead, mercury, &c., has toxic properties peculiar to it. This fact was announced by MM. Landouzy and Maumené, at the last meeting of the Academy of Sciences.

It was formerly the custom to fasten down champagne corks with iron-wire; but latterly galvanized wire has been much used for that purpose. The masses of wire, from two to twenty pounds in weight, are cut into small pieces, twisted, and then beaten by the workmen. During this process the particles of zinc employed for galvanizing the wire become detached, and, being respired, produced a peculiar species of metallic poisoning, now described, I believe, for the first time.

The principal symptoms are, general malaise, rigors, headache, and excessive thirst, soon followed by severe inflammation of the throat, pain over the larynx and angle of the jaws, tumefaction of the submaxillary glands, swelling, and ulceration of the amygdalæ, salivation, fetid breath, and finally cholicky pains with diarrhœa. All the workmen employed were attacked by the above symptoms, which disappeared as soon as they ceased to work with galvanised wires, giving off a metallic dust. The relation of cause and effect was here, therefore, manifest, and we have to add *one* more to the long catalogue of human maladies. Fortunately, moderate precaution will suffice to prevent its development.

THE DIGITUS SEMI-MORTUUS.

M. Gillet makes some interesting observations on this condition, to which attention has been lately directed by Dr. Marshall Hall. According to M. Gillet, it is always a symptom of some *other malady*. In youth, it generally occurs among chlorotic females, and several of the fingers are usually affected at the same time. The temperature of the insensible finger is always increased. Although local stimulants produce good effect, the diseased condition of the finger is more certainly removed by constitutional treatment of the disease with which it is connected.

In middle or advanced life, the affection assumes a different character. The finger is cold, often semi-flexed; the colour of the skin not so pale or death-like; in most cases the middle finger is the only one attacked for some time, but afterwards one or more other fingers become involved.

Here the digitus semi-mortuus is but the early indication of a serious disease about to be developed in the brain or spinal marrow; and the attention of practitioners cannot be fixed too soon on a condition which, if neglected, may lead to unfortunate results.

CAUSES OF CHOLERA.

At a late meeting of the Institute was read a highly-interesting memoir on the epidemic attack of cholera in the prison at Brest, occupied by the galley-slaves. Some facts, which seem clearly to connect the development of the disease with malarious causes, may be worthy of record. The prison contained 2662 inmates, distributed in four wards and in an infirmary. The four wards are furnished, each with 27 water-closets, in order that the prisoners of each row may be enabled to reach the closet without being unchained, for these unhappy culprits never quit their heavy chains for an instant. The water-closets communicate with a drain which opens into the harbour of Brest, and at low water the south-west winds, blowing up the unguarded drain, force back the mephitic vapours into the very wards. The infirmary and the condemned cell are free from this inconvenience. 189 cases of cholera occurred in the prison, and of these no less than 113 proved fatal. Now, of 2445 prisoners in the

wards just alluded to, 165 were attacked by cholera; while of 217 individuals in the infirmary and condemned cell, only three persons were attacked. The very same result had occurred in 1832. At that period fifty-three prisoners were cut off by cholera in the wards furnished with water-closets connected with the open drain, while in the infirmary, which is free from this source of disease, only a single death took place. It is not often that we find so striking an example of the influence exercised by unwholesome exhalations in the development of cholera.

SCOTLAND.

[Edinburgh Correspondence.]

IMPERMEABLE STRICTURE.

Among the topics of interest at present in Edinburgh is Mr. Syme's bold challenge to the London Hospital Surgeons on the subject of his recently published operation for the cure of stricture in the urethra. At the last meeting of our Medico-Chirurgical Society, Mr. Syme stated the substance of the challenge he designed to send to London—the same which has since appeared—the occasion of his statement being the reading of a paper which may be described as on the antiquities of the treatment of stricture. This paper was a letter addressed to a young surgeon nearly thirty years ago by Mr. John Walker, an Edinburgh surgeon, well-known in his day, but long since retired, and now dead for some years, the subject being the treatment of stricture by the potassa fusa. The exhibition of the instruments employed by Mr. Walker created some surprise, chiefly owing to their great size. Our excellent townsman and fellow-practitioner, Mr. William Brown, who brought forward this letter, premised it by a short biographical notice of Mr. Walker, and read some extracts from a very interesting correspondence which had passed between Mr. Walker and his father, a still older Edinburgh surgeon, more than sixty years ago, at the time when the son was prosecuting his studies in London, in the days of John Hunter, a prominent subject in the correspondence. Notwithstanding the high authority of Mr. Walker's surgical teaching, his rules for the treatment of stricture by caustic met with little quarter from the Society, and Mr. Syme said he expected, by the kindness of Mr. Benjamin Bell, to be able to bring before the Society a series of letters addressed, more than forty years ago, to Mr. Bell's grandfather of the same name, the well-known Author of the "System of Surgery," by the most eminent surgeons of that day, in London and throughout the kingdom, to show that, even at that early period, the demerits of the treatment by caustic were well understood. Mr. Syme then took the opportunity to say, that his own operation for stricture had been misunderstood by some surgeons in London, and confounded with the most objectionable practice of cutting into the perinæum in search of the obstructed canal, without any further guide than the point of a catheter, introduced, not through, but down to, the contracted point. Mr. Syme's operation is performed with the aid of chloroform; it is essential that a grooved director, slightly curved, should be first passed through the stricture; the management of this is confided at the outset to an assistant, of whom there are two; the surgeon then makes an incision in the middle line of the perinæum or penis, wherever the stricture is seated. The incision should be an inch or an inch and a half in length, and should divide the textures exterior to the urethra. "The operator then taking the handle of the director in his left, and the knife, which should be a small straight bistoury, in his right hand, feels, with his forefinger guarding the blade, for the director, and pushes the point into the groove behind or on the bladder side of the stricture, runs the knife forwards so as to divide the whole of the thickened texture at the contracted part of the canal, and withdraws the director." Then a silver catheter, No. 7 or 8, is introduced into the bladder and retained by tape. Mr. Syme does not allow that there is any truly impermeable stricture, and his challenge to London is, that he will admit into his wards and publicly treat, by this method, any patient who comes with a certificate from a London Hospital, that his stricture is considered as impermeable, paying the cost of his passage by steam from and to London. We hardly anticipate that Mr. Syme's offer will be accepted, or that the controversy which has arisen will be settled on so simple a plan.

As to the treatment by caustic, the general opinion here is so hostile, that we can hardly refuse to join in Mr. Syme's opinion, "that, on the whole, it seems more reasonable to conclude, that in the cases of alleged cure by caustic, there was no real stricture in existence, than to suppose that so improbable, or rather impossible an achievement had been accomplished."

He thinks that a real organic stricture cannot be removed by caustic, because the nitrate of silver, even if it could be applied accurately, is so limited in its destructive effect as to be quite inadequate for the purpose, "while that of potassa is so diffused, that in the event of destroying the stricture, it must cause a worse one, through the unavoidable loss of substance attending its operation, and the consequent contraction in healing." There is an old idea now almost forgotten, as to the mode in which the potassa fusa acts in the cure of stricture, namely, that it exerts no destructive effect, but that, forming with the mucus of the urethra a species of emulsion, it loses its causticity and merely deadens the sensibility of the canal, so as to permit the immediately subsequent use of large bougies. Of the efficacy of large bougies, where their use is admissible, there can hardly be a doubt; but it is to be feared, that in many of the cases, to which the just mentioned explanation was formerly applied, there was in reality no stricture. It is really a sad thing to look at the enormous accumulation, since the commencement of the present century, of the literature of so limited a disease as stricture in the urethra. For the credit of surgery it is quite necessary that the rules of treatment should speedily be placed on a fixed footing. We cannot, however, expect that the two propositions which Mr. Syme puts forward will be received without a prolonged controversy. These are: 1st. That the division of a stricture, by external incision, is sufficient for the complete remedy of the disease in its most inveterate and obstinate form. 2ndly. That in cases of less obstinacy, but still requiring the frequent use of bougies, division is preferable to dilatation, as affording relief more speedily, permanently, and safely.

IRELAND.

[Dublin Correspondence.]

THE COLLEGES.

The Fellowship Examination, just gone by, has been the talk of our University friends for some little time. The successful men were:—Messrs. Barlow and Rutledge, the Madden Premium man, Mr. Connor.

Our exemption from the "visitation question," now troubling the old ladies of Oxford and Cambridge, is a great blessing; we should infallibly have a row, and it would be a pity to put poor old Donnybrook out of one of its most respected privileges, now that its anniversary is so near.

The English Universities, unlike Dublin, seem not at all to understand that they were purely ecclesiastical in their origin, sometime under the dominion of the Pope, and, at the Reformation, handed over to the Crown. The last of the Henries, if I recollect rightly, visited these old places; and merely to the anxiety of Elizabeth on this score, we owe, perhaps, the great foundation in Dublin, which has, in its quiet, unobtrusive way, done so much for science, literature, and medicine; and, if only let alone, under the quiet management of Dr. Todd and one or two others, promises now to do still more. Our old monasteries were the medium of handing on the lamp of knowledge, by means of the St. Finbars, in whose steps Sir Robert Kane told us, the other day, he intended to tread, and under shadow of which fine fancy the Provincials have got through their first session so amiably.

A good deal of speculation exists as to the new Professor of Chemistry. The indefatigable Professor of Botany to the Dublin Society, Dr. Harvey, has just returned from America and the West Indies, rich with the spoils of his explorings among the *Flora* of these countries. He begins his usual Summer Course at Glasnevin in great force.

A proposed Ophthalmic Hospital, adjoining the University School, is among our other novelties.

RICHARD CARMICHAEL.

The last *Quarterly* contains a biographical sketch of poor Carmichael—the Astley Cooper of our Irish school—whose researches on syphilis have worked such a revolution in the treatment of this disease, and whose munificence, if not generally known, deserves to be, in a very eminent manner. After spending his early years in the army, it seems, at the peace of Amiens, he left the service and settled in Dublin, and not till the year 1814, after practically testing his views on syphilis, did he bring out his *opus magnum* "On the Venereal Diseases Confounded with Syphilis, and the Symptoms which exclusively arise from that Poison." His views met with much opposition from the Edinburgh School, and even from Mr. Colles, in Dublin. It is a kind of retributive justice, however, to find a northern journal for the present quarter recommending all such books as still worship the god Mercury to be burned; Mr. Carmichael's views now prevailing very generally in both countries. In 1826, in conjunction with Mr. Adams and the late Mr. M'Dowell, Carmichael founded the School of Medicine which now bears his name, generally known as the Richmond. For the last eight years he gave 50*l.* in premiums to the students, and left, by his will, 2000*l.* for the same purpose; also a sum of 8000*l.*, under certain regulations, for the improvement of the school. His whole soul seemed wrapped up in the advancement of Medicine as a science; and, in his will, he also left the College of Surgeons another sum, to be distributed, every fourth year, a premium of 200*l.* for the best Essay, and 100*l.* for the second best—on the improvement of Medicine scientifically and ethically. Such a man as Carmichael, indeed, is little less than a public blessing at the present moment; and it is to be hoped these Essays will prove of very eminent service when the Profession seems almost a distracted chaos.

MODUS OPERANDI OF COD-LIVER OIL.

The chief point for which Dr. Williams has been "pulled up" a little in Dublin, is copying his theory of the action of cod-liver oil from Bennet of Edinburgh—*tantas componere lites?* There is not a fact recorded in Dr. Williams's paper that had not been foreshadowed by the Edinburgh Professor, say our Dublin authorities. "The presence of so highly combustible a material as oil must check the process of oxidation, and thus prevent the degeneration of the corpuscles into the aplastic state of pus globules." This, if not simply ridiculous, when we consider the compound nature of the cell, is so perfectly gratuitous, that the Reviewer can only take comfort to himself, that the reasoning is that of Dr. Williams. From the tenour of the review, this compliment, however, would seem to be rather one of regret. As early as 1847, Bennet gave up the idea of the efficacy of iodine in the oil, its action being rather due to the fatty matter being more easily assimilated; oil and albumen, as pointed out by Ascherson, uniting to form elementary molecules and granules, from which healthy nuclei and cells are generated. Dr. Williams, on the other hand, believes the oil proves serviceable by supplying "fat molecules," of a "better kind, more fluid, more divisible, and more capable of being absorbed"—a rose by another name, if we are to believe the *Quarterly*. But really, after all, perhaps, though there is not that vast difference, it is of greater advantage to find these eminent practical men differing only to agree. Explain its operation how we may, the value of the oil is corroborated by every day's experience.

THE *Gazette Médicale* informs its readers, "that Mr. *Volkey* (*sic*) is about to retire from Parliament in consequence of a misunderstanding between him and his constituents." I wonder whether the Gallic admirers of the worthy "Crowner" will recognise him under such a metamorphosis.

THE cholera has re-appeared with violence in the town of Louvain. It has likewise broken out a second time in several of the towns of Prussian Saxony.

THE NEW SERIES OF THE MEDICAL TIMES.

THE EDITOR of the *Medical Times* begs to announce to his Readers that arrangements are now completed by which it is intended to raise to the highest point the literary and scientific character of the Journal.

He refers with pride to the annexed unrivaled list of Contributors, by whom Papers will be communicated to the New Series of the *Medical Times*. He believes that no Journal has ever been able to boast of so numerous and eminent a body of supporters, and he has to allude with feelings of great satisfaction to the fact, that many of these Gentlemen have been led to support the Journal solely in consequence of the truthful tone and scientific position which it has assumed. It is evident, that with the support of these Contributors and of many other friends, from whom permission to publish their names has not yet been sought, the *Medical Times* will be able to place before its readers a greater amount of original and valuable matter than will be found in any other Journal.

The improvements in the Reports of Hospital Practice, and of the proceedings of the Medical Societies, have received the praise of those best qualified to judge. Attempts will be made to raise this department of the Journal, in the next Volume, to a still higher point of usefulness and value.

The Selections from Foreign Journals, the Bibliographical Record, and the Review of New Publications, will be continued with the same care and impartiality.

Selections will also be made from contemporary Medical English Journals, so that the readers of the *Medical Times* will be informed of every improvement and advance which is made in the Science and Art of Medicine.

The Editor further assures his readers, that it is his firm determination to make this Journal the most scientific, the most practically useful, the most impartial,—in fact, the BEST Journal of the day. The improvement of the Profession, and the satisfying its wants, are the only objects at which he aims; and he knows that these can only be accomplished, so far as this Journal is concerned, by giving to the *Medical Times* the highest scientific character, combined with a moral tone the most honest and unimpeachable.

In order fully to carry out these intentions, the Proprietors intend to alter the mode of printing the Journal; and at the commencement of the new Series, in July, the *Medical Times* will assume an improved and enlarged form. In consequence of the additional expense thus incurred, it has been decided to raise the price to *sevenpence* for the UNSTAMPED Journal, and *eightpence* for the STAMPED.

In conclusion, the Editor has to thank his Professional brethren most sincerely for the great support he has met with. The commendations which the most esteemed of the Profession have paid to the *Medical Times*, is the best reward he could receive for the exertions he has made to make this Journal every way worthy of the enlightened Profession it represents.

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ROSS, G., Esq.—Secretary to the National Institute.
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SIMPSON, Dr.—Professor of Midwifery, University of Edinburgh.
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STEVENS, Dr.—Author of "Observations on the Healthy and Diseased Properties of the Blood."
SYMONDS, Dr.—Consulting Physician, and formerly Senior Physician to Bristol Infirmary.
SYMONDS, F., Esq.—Surgeon to the Oxford Medical Dispensary.
TAYLOR, T. Esq.—Lecturer on Chemistry at the Medical School of the Middlesex Hospital.
TAYLOR, JOHN, Dr.—Physician to the Huddersfield Infirmary.
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TODD, Dr., F.R.S.—Professor of Physiology in King's College, Physician to King's College Hospital.
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THE MEDICAL TIMES.

SATURDAY, JUNE 8, 1850.

For many months during the past winter, a discussion on the diseases of the uterus was carried on before that famous "Académie" whose voice is the expression of the Medical Science of France. The ablest men in Paris gave expression to the knowledge which had been gained by vast opportunities, cultivated with unwearied assiduity. Yet, unfortunately, it soon appeared, that, if the number of the observers was great, the differences of opinion were not less considerable. At the close of the discussion, the chief result was a general conviction, that although much was undoubtedly known respecting the diseases of the uterus, yet that the master-spirit was still wanted, who could bind up into one sheaf the scattered ears which the gleaners had gathered from the soil.

The impression produced on our mind by the debate at the Medico-Chirurgical Society on Dr. Lee's paper "On the Abuse of the Speculum Uteri," was similar to this. Not, however, that the opinion of the Society was divided, as in the case of the French Academy—there was, on the contrary, a rather surprising uniformity, in one of the fullest meetings which has been held for some time past. But we felt, in spite of the able paper of Dr. Lee, and the excellent observations which subsequently fell from some of the speakers, that the question had not received its full solution.

There were two points before the Society, which may be said to have been debated simultaneously by the majority of speakers. The first was simply as to a matter of fact. Dr. Lee affirmed, in his paper, that the existence of ulcerations, or other conditions of the os uteri, requiring the use of the speculum, had been excessively exaggerated. Dr. Ashwell declared, that in 1025 women examined at Guy's Hospital, not more than from 20 to 30 were labouring under inflammation of the *cervix uteri*. The statistics of St. George's Hospital and of the Marylebone Infirmary were quoted, in which 3000 uteri were examined after death, and not more than 25 per 1000 were found to have inflammation or ulceration of the neck. These statements seemed to carry away the Society; and Dr. Bennet's counter-assertion, that he had met with ulceration of the *os* in 220 out of 300 cases of uterine disease, was received with incredulous derision. The Medico-Chirurgical Society seemed to conclude that ulceration of the os and cervix uteri was a very rare disease, and, having arrived at this decision, it had no difficulty in heartily seconding Dr. Lee, in his warm denunciations against the abuse of the speculum.

Now, whether or not the Society was right in this opinion, it is not for us to decide. Whether ulceration occurs in 1 per cent., or 10 per cent., or 20 per cent. of all cases of uterine disease, we may safely leave to those whose researches, carried on without bias or pre-conception, must ultimately settle the point. But we are convinced that the Society was right in its decision on the second question which was before it, and that whatever may be the actual frequency of ulcerations of the uterine neck, it *cannot* sanction that indiscriminate, indelicate, and unprofessional use of the speculum uteri, which has come lately into fashion among us.

We have already exposed, with our utmost vigour, the improper practice which Drs. Ashwell and Lee so strongly condemned. All we said on that occasion we repeat now. We repeat that the speculum, useful, nay, indispensable as it is in many cases, ought never to be employed unless the practitioner *knows* that its use is required. To employ it, as it is rumoured certain persons in London have employed it, to attract notice, and place themselves prominently before the public, to use it merely as a means of personal advancement, in fact *to gain practice* (!) is a crime against the laws of morality, and treason against professional honour.

The erroneous and one-sided opinions which the advocates for the indiscriminate use of the speculum hold, prove how little they have presented to themselves the true facts of the case. Dr. Locock—who made the startling assertion, that delicacy ought not to be considered in matters of disease, and was both for and against the speculum—said, that he looked into the vagina as he would into the throat. True enough, so far as *he* simply is concerned. He would look into the vagina as an ordinary matter of business, and think *only* of what, in the course of business, it might be necessary to do there. But would the *woman* regard it in this philosophical light? Is it the same to *her*, whether her tongue is pressed down with a spatula, or her vagina distended with a speculum? Is *her* moral state to be left out of account altogether, and are we to treat the most sensitive organ in her frame as if it was so much inert matter, whose great use was to be cauterised?

We do not hesitate to say, that no man who regards properly his science and himself can ever use this instrument without feeling that he is *driven* to it; that other means have failed, and that it has become necessary to adopt additional modes of investigation and of cure. And if it appear, from the inquiries which will, doubtless, now be made, that the necessities for its employment have been knowingly exaggerated by its advocates, no condemnation can be too severe for so great a breach of scientific honour.

Let us, however, in this condemnation, carefully separate the abuse of the speculum from its use. To give up the employment of the speculum would be to deprive ourselves of an occasional invaluable aid to diagnosis and to treatment. All we demand is, that this aid shall be employed *properly*,—that is, as a means of cure for the person treated, and not as a method of obtaining for the person treating, worldly consideration and success.

STATISTICS OF MEDICAL REFORM.

Although we have already exposed the fallacies contained in the Memorial presented to Sir George Grey by the Provincial Surgeons, we think that the Tables appended to this Article will be acceptable to the Profession, as affording conclusive evidence upon some important particulars in issue between the National Institute and the Provincial Association. These Tables have been framed by the industry and zeal of Mr. Self, a surgeon, practising in the Tower Hamlets.

It was very kind and very patriotic of Mr. Cartwright to suggest the disfranchisement of the "insignificant minority," as he was pleased to style the Licentiates of the Hall in his Memorial. Has this gentleman an antipathy to science, that he strives to degrade and ignore the most highly educated order of the General Practitioners of Medicine? Mr. Cartwright is a Licentiate of the Hall, and we should like to know from him whether the better part of his professional qualifications was not obtained to meet the requirements of the examination at the Apothecaries' Society? But the Memorialists are veracious men. They tell us that the mere Licentiates of the Hall do not amount to more than "one in twenty" of the Profession. It is a great pity, for the credit of these gentlemen, that such a science as arithmetic exists. If the College of Surgeons extend the newly appointed examinations in mathematics to their members, we shall not in future find so large a number of that body ignorant of the elementary rules of subtraction and division. Detraction and division are arts in which some of them, at least, are already sufficiently expert. This contempt for scientific acquirement is not peculiar to the Memorialists.

No scheme of Medical Reform can be accomplished that does not make equal provision for all classes of General Practitioners in this country. They must be no longer a divided body, jealous, unsocial, and discordant. Practising one Profession, with a common interest, they must be united in one incorporation, with equal rights and equal laws. Pariahs there must be none. Our Profession is dishonoured by whatever degrades a section of its members. Even the sentiments of the Memorialists are humiliating to the sense of honour that characterises the Profession at large. The public are apt to judge us by what we say of ourselves; we should be careful, therefore, how we indulge in the license of imputation and reproach, as every word will be evidence to our own condemnation. If two men quarrel in the street, and one call the other a "dirty fellow," we may be sure that himself is the dirtier fellow of the twain. A police-officer would have some difficulty in making a choice of respectability. Much of the illiberality and bad taste discovered in the Memorial may be attributed to a certain rusticity in the character of the individuals who prepared it, and we shall, therefore, with much alacrity, cleanse the reputation of our provincial brethren of the stain which sentiments so unwise are likely to fasten upon it. The provincial Surgeons, as a body, are able and enlightened men; as individuals many have illustrated the history of Science by their genius, and have acquired European renown.

We wait for the development of the transcendent talent of Messrs. Beever and Cartwright, which shall raise them to the level of the irresponsibilities, and justify their mission. *When* they have displayed the powers we desiderate, they will be ashamed of the sentiments they now avow, and, ardently loving the Profession on which they have bestowed and from which they have received honour, they will be jealous of every speech and act that may slanderously affect any portion of its members, and will desire to elevate all their brethren to the highest possible standard of respectability, science, and usefulness.

Mr. Self had prepared an analysis of the Deputations to Sir George Grey, and showed that *five* members of the Provincial Deputation were *Fellows* of the College of Surgeons, and *ten* of them Surgeons and Physicians to Infirmaries and Hospitals. This portion of the Analysis but imperfectly represents the animus of the Provincial Association, for the Deputation appears to have been designedly constituted so as to convey to Sir George Grey the idea that it represented the body of General Practitioners. At the Provincial *Meetings*, the speakers and active parties were Physicians and Fellows of the College; but on the Deputation we find only—and enough too—*three* Physicians and *five* Fellows! This was a shrewd trick. It would not have answered that the same persons who bustled with superfluous activity at the Meetings should have been foremost on the Deputation, as the covert hypocrisy of the Association would have been exposed, and its designs ignominiously crushed. The General Practitioners on the Deputation were made the instruments of the other orders.

The Provincial Association, unlike the Institute, had recourse to another expedient to dignify their cause, and enticed to the Home Office about a dozen M.P.s, who confessed that they knew nothing about the matter, and would be just as likely to vote in Parliament against the Deputation, as to support its views. From the benefit of this opinion we do not exclude even the consistent Mr. Wakley, who was one of the honorary members of the Deputation. This gentleman may be fairly taken as a sample of the whole. The National Institute relied upon the justice of its claims, and upon the strength of its arguments, and disdained to obtrude a show of coercion which it might not be able on a critical occasion to bring into effective operation. M.P.s are to be had for the asking.

We append the two following tables, which will be found to have an interesting bearing on the case of the General Practitioners. The calculations are made from facts collected from the district of the Tower Hamlets, one of the most populous and extensive boroughs in the Metropolis.

TABLE I.—Showing the Gross Number of Medical Practitioners in the Borough of the Tower Hamlets, with the Statistics of Qualifications, and the Relative Number of L.S.A.s, the "mere Licentiates or insignificant minority."

M.D.s, M.R.C.S.s, and L.S.A.s	14
Do. do.	5
Do. and L.S.A.s	4
Do. (British and Foreign)	5
Do., Foreign and before 1815	3
M.R.C.S.s and L.S.A.s	100
Do., before 1815	19
Do., since 1815	25
L.S.A.s	50
L.R.C.S. Edin., 1; and Dublin, 2	3
In Practice before 1815	7
	235

TABLE II.—Showing the Number of Qualified Medical Practitioners resident in the undermentioned Parishes in the Borough of the Tower Hamlets, whose Signatures for a College of General Practitioners were deposited at the National Institute, May 2, 1850, and the Number of Unqualified in the same.

—	Qualified Medical Practitioners.	Signatures.	Refusals.	Omitted.	Out.	Unqualified.
Bethnal-green (part of)	21	15	1	3	2	7
Bow	4	3	...	1	...	1
Bromley	1	1	...	...	...	...
Mile-end, Stepney	36	28	...	5	3	12
Limehouse	10	8	...	2	...	2
Poplar	10	9	1	...	...	4
Ratcliff	3	2	...	1	...	...
St. George's East	20	14	1	3	3	6
Shadwell	3	3	...	...	...	2
Whitechapel	18	12	...	3	3	1
	125	95	3	18	12	35

PROPOSED SOCIETY FOR INVESTIGATING THE HISTORY OF EPIDEMICS.

"Semotique prius tarda necessitas
Lethi, corripuit gradum."

"Πολλους δ' ιφθιμους ψυχας αιδι προιαψεν."

We have often contemplated, in our musings on the great cycles of events which mark the silent progress of time, a narrative of those fitful epochas which, at uncertain intervals, have cast the shadow of their gloom o'er the stirring hearts of men, and leveled with the dust the bright sunny prospects of myriads of human beings,—by the fell catastrophe of the black death—the sweating sickness—the plague—the cholera,—and those other inscrutable mysteries of Providence by which the nations are left desolate, and the earth mourns in hapless widowhood the hopes of her future years. Often have we recalled the subject to our mind, and as often have we dismissed it, overcome by the magnitude of the task. Often have we indulged the expectation, that, in the calm of retirement, we should be gratified leisurely to meditate on the succession of the destinies of man, and as often have we shrunk from the labour, to which we felt our powers unequal, — circumscribed, "cribb'd, cabin'd, and confined." Yet our aspirations were but the breathings of that natural impulse in the human mind to trace the series of events which await the fitful fever of the great drama of life, and which, with sleepless certainty, hang on the footsteps of humanity, besieging all its paths, anon, with the lone quiet of the grave; and whilom leaving it in the fresh and secure exultation of those warm hopes, which youth, health, and life seem to lavish with unmeasured bounty on all the members of the great brotherhood of mankind.

It is, therefore, with extreme pleasure we hail the institution of an Association, the object of which is to investigate the history and details of the great epidemics which, on different occasions, have devastated the fair surface of society, and plunged the nations into mourning. This it is proposed to effect somewhat in the form of a Joint-stock Company, through the association of a body of gentlemen, highly competent to the performance of so onerous a task, and peculiarly prepared, by previous practical knowledge, as well as theoretical information, to prosecute a subject demanding so much untiring patience, careful research, and discriminating balancing of the too oft contradictory statements of different historians and contemporaneous witnesses. Under the auspices of Dr. Babington, pre-eminent no less for his classical reputation than for the soundness and judiciousness of his medical lore, we have nothing to despair in the prospects of this Society—his name is a host in itself sufficient to command success; but we rest no less firmly on the importance of the subject,—we had almost said its national, nay, even its world-wide interest. The history of epidemic diseases embraces all regions of the earth,—it includes all epochs of time,—it affects the interests of all men,—it teaches us, from the history of the past, to gather wisdom for the security of the future,—it seizes for our own immediate and prospective benefit the experience of all preceding time. As, indeed, our knowledge of the remote, as well as of the exciting causes of diseases, has assumed more of a definite form than heretofore, we are inclined to presume that the objects which the Association contemplate will not be the mere dry and vapid narrative of the general historian, so oft barren of all practical result, but will be pregnant with matters of vital importance to the inhabitants of every country and land, but, above all, to the denizens of Great Britain, whose densely-peopled districts seem so peculiarly favourable to the generation of epidemic and endemic disorders, with all the concomitant miseries, domestic, social, and political, which ever follow in the wake of those great scourges of humanity.

The appalling disclosures brought before the public by the recent Commission, occupied in the investigation of the state of the public health, has stirred up in us all a new spirit; and when we read that nearly 50,000 human beings are consigned to the premature grave, simply from the concurrent conditions of the want of pure air, pure water, and cleanliness, we pause and wonder,—can such things be; and is this the sad picture of the boasted and loudly vaunted civilisation of the nineteenth century? As, then, the concurrent causes of epidemic and endemic disorders have been, by the above documents, as well as by others, shown to act most extensively on the masses of the population, predisposed from general misery and wretchedness, it is apparent that, for the common Hygiene of the people, the history of the immediate as well as remote causes of those maladies present features of a high and commanding interest to all human beings. It might be argued *cui bono*—Of what avail is it for society to be taught the histories of the successive epidemics which have desolated nations? Such an idle question, we conceive, will scarcely be hazarded at present. We would nevertheless reply, that the history of the past is the record of what was *once* a present, big with the fate of millions of hearts that beat happily; and while it is conceded to be, beyond all question, established, that new and strange epidemics occasionally arise, differing in their symptoms from all those formerly described, though agreeing in the common result of their great mortality, it is no less undisputed that the localities which these different kinds of epidemics and endemics affect, or the places where

they have been usually found to prevail, have invariably been one and the same. In the city of York, the very same street which was the haunt of the Plague when it last occurred in England, is the very precise spot where the Cholera *resided* in 1832. Moreover, the same place is the nestling quarter of the common typhus fever, which is never absent from our country, and which may be so truly denominated our indigenous fever. What we have just now stated in respect of the city of York, holds no less true of the Metropolis, Liverpool, Glasgow, Dundee, Edinburgh; and, in short, every other locality where febrile disorders or epidemic diseases may arise, engendered by the three paramount conditions, want of cleanliness, impure air, and impure water; to which, occasionally, we might add, poverty or impoverished diet; but the latter alone is a very inefficient agent unless aided by the three others.

Thus the history of all epidemics conspires to indicate one common point or locality for all epidemic and endemic diseases. This at once leads directly to the grand principle for eradicating them wholly from society, by improving the dwellings of the lower classes of society, and completely removing the nidus of disease. But the history of epidemics is not a mere idle repetition of the series of phenomena affecting great masses of the people, for it embraces also an inquiry into the etiology of those maladies, in which the influence of physical, moral, and mental causes play so important a part; to control the operation and prevent the effect of which is the highest effort of the art of Hygiene, and the first duty of the Legislature. Nor is the arm of Hygiene powerless, nor the Legislative control invalid. Physical causes have, in the greatest measure, been the efficient agent in provoking the diseases; such however are, in no small degree, in abeyance to the control of man. As regards the co-operative influence of the moral and mental, it does not altogether appear that these are beyond his sway, while, even conceding that this were not the case directly, they are so indirectly, through the removal and avoidance of the physical, whereby the animal body acquires a firmer energy, and is less a prey to the exhausting and depressing effects which commonly accompany the panics of the people, who have lost all moral command of themselves.

The influence of associations of men for specific purposes is great; fable has typified it from the most remote period, in the story of the old man on his death-bed and the bundle of rods. Amongst numerous other instances, we have an ample demonstration of it in the formation of the Sydenham Society. How infinitely more useful to the public at large the present Association will be, it is not necessary to observe. Whatever arrangements it may please to form as to the mode and method after which the history of past epidemics is to be drawn, we trust it will heartily set to the great work of arranging and statuting all the collateral conditions which it is necessary to be instructed in, for framing and grouping the universal history of epidemic disorders. The physical geography of each particular district must be noted; its geological relations will also require to be studied; its hygrometric condition—its meteoric phenomena—the winds—the temperature—the solar radiation—the changes effected by agriculture, by drainage, by felling of timber. The internal physical economy of the people in the arrangement of their dwellings, past as well as present—the structure of their abodes—the facilities for the removal of nuisances—the supply of water—the ventilation—and lastly, the general nature of the occupations of the people, and their habits, especially as to the use of spirituous and malt liquors, demand a scrutiny no less strict and severe. But we are getting into the tedious prolix detail of particulars; it is sufficient to know that those and analogous subjects are especially to engage the mind and inquiry of the Association.

We possess learned tomes—ponderous, we might say with all safety, on the Aristotelian philosophy—the disputes of the Rationalists and Nominalists—the Cartesian whirlpools—the history of philosophy—the learning of the Greeks—the wisdom of the Romans—the subtleties of the sophists—*et id genus omne*—useful, no doubt, as an exercise for the ingenuity of those who were free to wage the idle war of words, and deemed it no waste of their intellectual powers to contend to the death the truth of their theory, or the falsehood of their opponents. And yet, what are these but as the idle dust, balanced against the research into the history of the causes of death—the inquiry into the causes of security of life and the safeguards of health? How brief, yet clear and explicit was the expression of the artless and unsophisticated child of the desert, as he first contemplated that giant instrument of modern civilization, the steam-engine, when (for the iron of sorrow had pierced his heart)—"good—grand—glorious—almost a God"—he exclaimed; "but can it" (and here he sighed) "can it recall the dead?"—

"Back to its mansion call the fleeting breath?"

It must at once be seen that there will be certain imperfections in the history of past epidemics; but those that are to succeed will, we judge, be balanced with more precision and fidelity, because we are now better instructed in the modes of observation, and our instruments are of a more nice and delicate character. It is further apparent that an inquiry of this nature proceeds hand in hand with those which have been already instituted by the Government in its Commission on the Public Health; and though the description of these epidemics may assume a more *recherché* character, they are not consequently the less practically useful, for, in the great question of health—*Salus Populi Suprema Lex*—all knowledge is power; no fact—so it be a fact—too trifling or minute, which may not be put to its practical and particular account, in perfecting our acquaintance with the relation of things—the successive series of causes and effects. We rejoice, then, to observe that an inquiry which could at the best be but imperfectly performed by the isolated individual, is to engage the attention of an associated body of gentlemen well adapted to the task. We shall feel most happy to co-operate in so good and great a cause, and assist to consolidate and work out the views proposed and entertained by the members of the Association for drawing up the Universal History of Epidemic Disorders.

REVIEWS.

Lectures on Electricity; comprising Galvanism, Magnetism, Electro-magnetism, Magneto and Thermo Electricity, and Electro-physiology. By HENRY M. NOAD, Lecturer on Chemistry at St. George's Hospital, &c., &c., &c. Third Edition. Knight and Sons.

We hail the appearance of this volume, as a valuable addition to our scientific literature; for, since the publication of "Singer's Elements of Electricity," upwards of five-and-twenty years ago, we have not met with a condensed and popular account of that truly important science.

It has been a common error with writers upon Electricity, to enter into long details and abstruse discussions, by which the simplest phenomena, in place of being plainly elucidated, are mystified by the unsparing use of technicalities and algebraical formulæ.

The volume now before us is free from these objections; and, after its attentive perusal, we can confidently recommend it to the student of science and the general reader, as giving a lucid view of the present state of electrical science.

We perfectly remember, in our school-boy days, our humble attempts to construct an "electrifying machine," and, after the many failures consequent upon the very imperfect descriptions that we could obtain from the books to which we were permitted limited access, our intense delight at receiving the first electric spark from our homely apparatus; what a treasure the present volume would have been to us in those days!

But, as regards the importance of the science of electricity, we cannot do better than to quote the words of the Author, in his introductory or first Lecture:—

"There is, perhaps, no branch of experimental philosophy which is received by persons of all ages with greater pleasure than electricity. The reasons are obvious. It is the science susceptible of the most familiar demonstration, and its phenomena, from the striking and ocular manner in which they are presented, are calculated to arrest the attention, and become fixed on the mind more powerfully than those of any other science. To this may be added, its connexion with the most sublime and awful of the agencies of Nature; its secret and hidden influence in promoting at one time the decomposition of bodies, and at another time their re-formation; at one time, in its current form, causing the elements of water to separate, and exhibiting them in the form of gases; and, at another time, in its condensed form, causing these same gases to re-unite, and become again identified with water; now, in its current form, exhibiting the most wonderful, and sometimes terrible, effects on the muscles and limbs of dead animals; and now, in its condensed form, moving with a velocity that is beyond conception through the living body, and communicating a shock through fifty or a thousand persons at the same instant; now exhibiting its mighty powers in the fearful thunder-storm, and now working slowly and quietly in the development of beautiful crystals. With such varied subjects for contemplation and admiration, it is no wonder if electricity should be a favourite and fascinating study.

"The statement, that electricity is a science susceptible of familiar demonstration, must be understood in reference to its *general laws* only; for, as with other branches of natural philosophy, the investigation of its particular details, the analysis of its laws of induction, distribution, attraction, and repulsion, &c., are each matters requiring the resources of mathematics, and fitted for the study of the profound philosopher only. With such subjects we have, however, obviously little to do in the following lectures, the design of which is to give a popular account of the present state of the sciences on which they are to treat, and to show their connexion with each other."

The foregoing are the introductory sentences of the First Lecture, which is devoted to some of the preliminary phenomena of electricity—viz., its excitation, its passage through some bodies; its arrest by others; the instrument or electroscope by

which its presence may be detected; and the construction of the electrical machine.

In the Second Lecture we are presented with a popular account of Faraday's researches regarding induced electricity; the methods of conducting the Leyden vial, and many experiments concerning accumulated electricity; the effects of electricity on germination and vegetation; all of which are extremely interesting matters.

In the Third Lecture the Author enters upon Franklin's discovery of the identity of lightning with electricity, and gives ample directions for safely managing electric kites, which, as may well be imagined, are rather dangerous contrivances in unskilful hands. He then adverts to the atmospheric apparatus of Crosse and Weekes, examines the phenomena of the thunder-storm, and fully considers the question of lightning-conductors,—a subject upon which much has lately been written, and much, also, unfortunately with a degree of acrimony totally inconsistent with the spirit of true philosophy,—and terminates with some observations regarding the phenomena of water-spouts, volcanic eruptions by sea, and the aurora borealis.

The Fourth Lecture is entirely devoted to galvanism, and galvanic or voltaic batteries; their respective merits are pointed out, and the manipulations for experiments with them are amply detailed.

This subject is continued in the Fifth Lecture, and practical applications of the heating power of the voltaic current are brought before the reader, regarding Patley's operations upon the wreck of the Royal George and the Round Down Cliff explosion.

Then the decomposing powers of the battery are dwelt upon, the wonderful experiments of Davy, Faraday, and Crosse, are elucidated, and a statement respecting the electrical *acarus* or insect discovered by the latter philosopher—a fact that, our readers may remember, created a great degree of excitement in philosophic circles a few years since.

In Lecture the Sixth, voltaic electricity is still continued, chiefly as regards its physiological effects. Animal electricity is then discussed; the recent experiments upon the *gymnotus;* and the Lecture terminates with an account of Armstrong's hydro-electric machine, and the theory of the voltaic pile.

In the Seventh and Eighth Lectures our Author enters upon the difficult field of magnetism, and electro-magnetism; but, as in the previous lectures, so in this, he adheres to the simplest explanations of these recondite phenomena, and particularly points out the construction of the greatest scientific wonder of the present day, viz., the electro-magnetic telegraph. Thus, proving the inestimable value of what for many years was a mere curious fact of the laboratory or lecture-table. We mean, the fact discovered by Oersted, of the deflection of the magnetic needle by the electric current. Lecture the Ninth is devoted to magneto-electricity and thermo-electricity; and the concluding lecture contains an elaborate account of electro-physiology. All the newly-elicited facts relating to this most curious subject, are lucidly detailed.

The Volume is illustrated by nearly 300 woodcuts, and its "getting up" is equally creditable to the Author and the publishers. In rising from its perusal, we can cordially recommend it to our readers.

LONDON HOSPITAL.—4090 in-patients were admitted during 1849, of whom 3783 were discharged cured, 298 died, and 321 remained in the Hospital. The out-patients amounted to 16,816 during the same time. The east wing is now complete, but the funds of the Institution are not sufficient to allow of its being opened for the reception of the sick.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

MAY 28, 1850.

Dr. ADDISON, President, in the chair.

ON THE USE OF THE SPECULUM IN THE DIAGNOSIS AND TREATMENT OF UTERINE DISEASES.

By ROBERT LEE, M.D., F.R.S., &c.

The Author commences this paper by observing, that the *speculum matricis* was said by Ætius to have been invented in the days of the Emperor Domitian, but that it must have been known to the ancients at an earlier period. In 1818, a bronze instrument, consisting of three branches, two handles, and a screw in the centre, was dug out of the ruins of Pompeii; it has been preserved in the Museum at Naples, and there is a description and representation of it in Vulpes' work, which, through the kindness of Dr. Greenhill, of Oxford, was placed on the table of the Society. This instrument is called *speculum magnum matricis*, and the Author observes, that there can be no doubt that it was intended to bring the os uteri into view, and is probably one of the most rare and perfect bivalve specula that have since been invented. Allusions are then made to the specula of Avicenna, Ambrose Paré, Allman, and Joannes Rufficus, some of which were not uterine specula, but midwifery instruments. The Author then states, that in 1801, Dr. Recamier, of Paris, began to treat ulcers of the uterus and vagina with topical applications, like those of the throat. By means of a slender tin tube, he applied to the ulcerated surfaces various simple substances, as mel. rosarum and syrup of carrots, and to these he states that he owed their marked amelioration. In the year 1816, Dr. Recamier enlarged the diameter of his conical tube, that the morbid parts in cancer might be brought more completely into view, and cauterization employed. Of this treatment the most favourable results were likewise published, although its total inefficacy was soon demonstrated. "The cruel practice of extirpating with the knife" the whole or portion of the cancerous or supposed cancerous uterus now began to prevail, and became, both in Paris and London, the source of great popularity and gain to some individuals, and the most flattering reports of the results were published. In the Memoir on Amputation of the Neck of the Uterus, presented by M. Lisfranc to the Institute of France, in 1834, the author stated, that of ninety-nine operations for cancer of the uterus, eighty-four had been successful. The statements made in this memoir are now universally disbelieved; and no man possessed of the most slender stock of sound pathological knowledge, and of the ordinary feelings of humanity, would, at the present time, propose to extirpate the whole, or any portion of a cancerous uterus. In the hands of M. Recamier and M. Lisfranc, the speculum led only to barbarous and useless cauterizations and operations. The instrument soon came to be extensively employed in the investigation of venereal diseases in the prisons, hospitals, and dispensaries of Paris, and many morbid appearances, very vaguely defined, were reported to have been discovered, by the aid of the speculum, which otherwise must have escaped detection. The speculum then became an instrument of police, and the sanitary laws of the principal cities on the Continent were regulated by the information thus supposed to have been obtained. The method of conducting the examination of the prostitutes with the speculum is then described; and it is stated that some of the most eminent surgeons in Germany and France conducted these public examinations, and endeavoured to perform the difficult and indelicate task of separating the clean from the unclean. The object of the Author, in this communication, is stated to be, to give concisely the results of his observation, during the last twenty-three years, on the use of the speculum in the diagnosis and treatment of uterine diseases, believing that at the present time it is equally important to the medical profession, and to society at large, that the legitimate use and real value of the speculum in practice should be accurately defined and made known. In the two great classes of organic diseases of the uterus—malignant and non-malignant, and in all the displacements of the uterus, he says he has derived little or no aid from the speculum, in their diagnosis and treatment. Several cases of ulcerated carcinoma are then related, in which the speculum and ignorance of uterine pathology appeared to have led to the commission of the most grievous mistakes.

The Author then proceeds to give a sketch of uterine disease before the middle period of life, and observes that an examination of the physical condition of the uterus, in unmarried women, either with or without the speculum, he has always refused to make, even when requested to do so, unless pain, severe and almost constant, in the region of the uterus, existed; leucorrhœa or hæmorrhage, which did not yield to treatment; and where the symptoms did not make him strongly suspect the presence of some displacement or organic disease. In cases of obstinate leucorrhœa he has often employed the speculum, in married women, after he had failed to detect the existence of organic disease by the ordinary mode of examination. The appearances observed in these examinations are then minutely described, and the fact stated, that the Author had never seen ulceration of the os and cervix uteri, in such a case, which was not of a specific character, especially scrofulous and cancerous. The lamentable effects of applying potassa fusa to the os and neck of the uterus are then given, in the histories of several cases. The following most important statistical statements were then given by the Author:—"In the year 1832," he says, "my colleagues at the St. Marylebone Infirmary, Dr. Hope, Dr. Lewis, Mr. Stafford, and Mr. Perry, late Secretary of the Society, at my request, desired that the uteri of all the women who died in the wards should be carefully examined, and that they should be preserved for my inspection when any morbid appearance was observed. From 1017 *post-mortem* examinations of females of all ages, made by Dr. Boyd, (after deducting those of children and others, in which special mention is not made of the uterus,) there were found 708 where either the state or weight of the uterus was noted. In thirteen of these there was congestion or inflammation, which had no specific character, and in some the inflammation was limited to the fundus, and could not have been detected unless the uterus had been removed or cut open. In at least three there were enlargement and induration, which did not appear to have any specific character, and in two there was extreme wasting: twenty-four were puerperal cases, thirteen dropsy of the ovaries or Fallopian tubes, in thirty-one fibrous or bony tumours, and in twenty-one, cancer." "My impression is," adds Dr. Boyd, in the same report, "that ulceration of the neck or mouth of the womb, is an exceedingly rare disease, else I must," he says, "have observed it; having cut up and weighed many hundreds, it could scarcely have escaped my notice." Dr. Allen, the present resident medical officer at the St. Marylebone Infirmary, who has held the office about twelve years, states to me that he has examined, or been present at the examination of the bodies of more than 1000 adult females, and of these he does not believe that he ever saw more than twenty examples of ulceration of the os uteri of any kind, scrofulous or venereal, excluding cases of ulcerated cancer of the uterus, which were known to exist before death. Dr. Allen further states that he has observed in some cases a portion of the mucous membrane of one lip slightly abraded; this he has seen occasionally, but not often. Mr. Prescott Hewett was six years curator of the Museum of St. George's Hospital, and conducted all the *post-mortem* examinations. He states, that during that time he could not have examined fewer than 600 uteri, and very seldom, if ever, did he meet with anything which could be called ulceration of the os and cervix uteri, independent of scrofula and cancer. Mr. George Pollock held the same office for three years, during which time he examined the bodies of 300 women, and in every case the uterus was cut open and examined. In four cases uterine ulceration was observed, but three of these were scrofulous patients, and scrofulous ulceration existed in other organs. In the fourth case the ulceration must have been cancerous, as it involved the vagina extensively, as well as the os uteri. Mr. Hewett and Mr. Pollock did not, therefore, observe a single example of simple ulceration of the os and cervix uteri in the 900 uteri they examined, which confirms the accuracy of the opinion given by Dr. Boyd, that ulceration of the neck or mouth of the womb is a very rare disease. Mr. Gray succeeded Mr. Pollock at St. George's Hospital, and he examined 180 uteri. Distinct ulceration of the os and cervix was only observed by him in three uteri, and the nature of the ulceration in these three cases was not determined with certainty. Mr. Gray states, further, that redness, slight abrasions, and granulations, were sometimes, but not frequently, observed. Neither in the living nor in the dead body, says the Author, have I ever seen ulceration of the os and cervix uteri, except of a specific character, and especially scrofulous and cancerous; but I have met with a considerable number of cases in which it had been affirmed by others to exist, after deliberate

and repeated examination by them with the speculum, where I ascertained that ulceration did not exist in the os and cervix uteri, nor disease of any kind. Cases are then given in which this gross mistake had been committed, and the paper concludes with a remarkable case of a lady, aged 50, (communicated by Dr. Copland,) in which the speculum was used with fatal effect, when it was ascertained, after death, that the uterus and all its appendages were perfectly healthy. There were marks of recent violence at the orifice of the vagina, and the hymen was torn. Lymph, recently effused, was found coating the upper part of the spinal cord.

SUPPLEMENT TO A PAPER ON FIBRO-CALCAREOUS TUMOURS AND POLYPI OF THE UTERUS.

By ROBERT LEE, M.D., F.R.S., &c.

Since the publication of a former paper on the same subject, the Author states that he has succeeded in injecting both the arteries and veins of fibrous tumours, and that there are preparations in the museum of St. George's Hospital, in which veins of very considerable size are seen passing from the central parts of the tumours to their surface in a winding direction, and gradually enlarging till they terminate in the uterine veins. Large cavities containing viscid fluid are then described as having been found in fibrous tumours, which had led to the supposition, during life, that they were ovarian cysts, and to the operation of tapping being performed. The author then proceeds to relate the history of a remarkable case of fibrous tumour in the anterior wall of the uterus, in the very centre of which he found an abscess, which, he says, has rarely, if ever, before been observed by any pathologist. This abscess appeared to result from acute inflammation, excited by four balls, the composition of which he could not ascertain, having been passed up to the uterus at bedtime, and to the introduction within the uterus, by another Practitioner, of a bent wire with a small wooden handle, which he thinks was probably the bent metallic probe, or blunt wire, sold in the shops under the name of Simpson's sound.

Mr. Acton said the Society was indebted to Dr. Lee for having brought before it instances showing that a plan of treatment, however good in proper cases, might be abused, and no one more than himself felt the necessity of restraining within proper limits the employment of a valuable instrument like the speculum, the use of which he had particularly introduced to the notice of the Profession nine years ago, by coloured delineations of the complaints in question, in his work on "Venereal Diseases and Affections of the Uterus." But why the speculum should be singled out for the strong observations made in the course of the paper he was at a loss to conceive. He was daily in the habit of treating cases where the abuse of drugs and lotions was particularly evident. Women were allowed to linger on, the victims of affections of the uterus, who for years had been employing these supposed remedies, without recourse being had to the instrument, which had too often been cried down by those who were now employing it. Much had been said respecting the indelicacy of the proceeding, and in the paper read that evening some accounts that might startle propriety were advanced; for instance, it had been stated that instruments were thrust or poked three inches within the os. Must not this be exaggeration? He (Mr. Acton) who had examined a large number of women was not aware that the uterus extended so far. As to the exposure and indelicacy which had been spoken of, English surgeons ought not to throw such imputations in the teeth of their neighbours, for what could equal the disgusting way in which females are treated in the London Hospitals? A foreigner might well blush to see a London surgeon, attended by a ward full of pupils, throw the bed clothes off a poor creature, and expose her to the gaze of those who are often attracted by a morbid curiosity. Yet in a paroxysm of affected regard for female feeling, charges of indelicacy are now brought against those who find it necessary to employ the speculum. What are really the facts which have been so much exaggerated? For the three years that he (Mr. Acton) had attended the venereal hospitals at Paris, the following was the plan pursued: students were not admitted indiscriminately; the women to be examined were not exposed in the wards, but a screen was placed before their beds if they were unable to get up; those who were able to walk were taken to the end of the ward, separated by a partition or screen, and then examined; thus 80 or 100 women were seen and effectually treated every morning. Now that he was on the subject, he must entreat the attention of the Society to another fact. In France these women were sent out cured from the hospitals, but this, he regretted to say, was not the case with women attended at the London hospitals. He was frequently consulted by patients who had contracted disease from women just dismissed from hospitals, connexion having been indulged in, in the fond belief that no risk of infection could occur. (Great laughter.) Gentlemen might laugh, but he could assure them it was no laughing matter to the diseased. In a sanitary point of view the examination of these women in London was often a mere farce; for, in consequence of not employing the speculum, the complaint affecting the external organs only was cured, the interior of the vagina remaining in a state of disease, which continued to spread the contagion when they quitted the hospital; these were, in his (Mr. Acton's) view, some of the abuses resulting from not using the speculum. Great surprise was expressed, that these lesions of the uterus were not observed after death; why should they expect the organ to present appearances which were not found in any other viscus. To illustrate this assertion (that after death we should not expect to find the appearances discoverable during life) he might cite the instance of a woman, murdered by her paramour some few years ago in St. Giles', who had contracted gonorrhœa from her. Through the kindness of Dr. Reid, he (Mr. Acton) had carefully examined the uterus, but no ulceration could be found, all redness had subsided, and a glairy discharge from the os was alone to be discovered. Here, then, was an instance in which undoubted infection had taken place, although but little appearances of disease could be found after death. Dr. Lee had objected to the treatment by cauterization, because granular affections of the conjunctiva were produced by caustic. He (Mr. Acton) was aware such an assertion had been made by one eminent man, but the fact was contested, even in cases of affection of the eye, and in diseases of the uterus there could be no doubt that a granular condition of the organ existed before any treatment had been pursued, that lotions were inefficacious, and that caustic was the only means of cure, and this, he must maintain, could not be employed efficaciously without previously introducing the speculum, which, in proper hands, was a most valuable instrument.

Dr. Ashwell said, he had listened with great pleasure to the paper just read, and he felt that the Profession and the public at large were deeply indebted to Dr. Lee for this able, temperate, and most seasonable expression of opinion. The paper dealt with what he thought had now become a great grievance, viz., the unnecessary employment of the speculum uteri. He (Dr. Ashwell) had had, at least, a moderate share of experience in the treatment of female sexual disease, both in hospital and private practice; and he had no hesitation in affirming, that the results of such practice were decidedly opposed to the views which had lately been advanced. He denied the accuracy of the statements, as to the extreme frequency of inflammation and ulceration of the cervix uteri; he could not concur in the remarks made by Mr. Acton; and he would ask, without more than a passing allusion to the large number of *post-mortem* examinations at St. George's Hospital and the St. Marylebone Infirmary, what was to be inferred as to the accuracy of the statements made by Dr. Bennet. Out of more than 3000 examinations the neck of the uterus was found to be the seat of inflammation and ulceration (excluding, of course, the ulcerations of malignant disease, such as cancer) in not more than 25 in 1000. This result Dr. Ashwell stated to be in accordance with 1000 cases of uterine disease falling under his care as Obstetric Physician to Guy's Hospital, many of which, observed Dr. Ashwell, were addressed to me by you, Sir, (alluding to the President, Dr. Addison). Thus, out of 1000 cases, there were but 25 in which inflammation of the cervix uteri presented itself. Now, this was precisely the class of patients treated by Dr. Bennet at his Dispensary, not from the higher walks of society, but persons in whom that inflammation would be most likely to occur. Taking these results, therefore, with those recorded by Dr. Lee in his valuable paper, he constitute a series of facts strongly opposed to the statement so often made of late years, that inflammation and ulceration of the cervix uteri are very common diseases. He (Dr. Ashwell) felt convinced that if the gentlemen in the room that evening were polled, if the opinions of those who had had experience in these matters in private and public practice were obtained, the result would be to the scientific fact which these gentlemen were to maintain. He wished it to be understood that it was his desire to say what he did without any personal allusions; scientific discussions to be carried on without indulging in personalities. He could not but rejoice, however, in the fact he had just stated, because if it were otherwise—if it could indeed be proved that these cases were as numerous as had been asserted, and that the disease really existed, as had been stated, and that there was but one proper mode of treating it—that by the speculum, it would then become a question whether it would be right to violate the feelings of English women, by its constant employment, as is at present practised. He contended that the use of the speculum, as it is now employed, was subversive of female safety and female delicacy. In seven instances out of ten, the speculum was now used without occasion. He (Dr. Ashwell) did not make this assertion without sufficient data. Its employment has become almost a *professional dishonour*, and it had been slowly forced on his mind, that if this course of things continued, it would afford almost a justification for the withdrawal of the treatment of female diseases from Professional men. He (Dr. Ashwell) was glad that Dr. Lee had introduced cases in which the use of this instrument, and of the other, the uterine sound, had been attended with fatal consequences. He (Dr. Ashwell) could add many more such instances, but he would not harrow their feelings by the distressing details. Dr. Lee would deserve well of the Profession, of society, and of the female sex, if he succeeded in putting something like a damper on the fashionable progress of this abused instrument.

Dr. Murphy addressed the Society with some hesitation, as he felt that he stood in some degree in the position of a defendant, with regard to the use of the speculum, as contra-distinguished from its abuse. He would freely admit, with the author of the paper, and with Dr. Ashwell, that there could hardly be a more mischievous practice than that resulting from the abuse of the instrument; but, on the other hand, he would as distinctly assert, that he knew that, in the treatment of those uterine diseases for which its employment was required, no other means than the appropriate and proper use of the speculum could be had recourse to. He (Dr. Murphy) had been much surprised at hearing Dr. Ashwell state that he had only met with twenty-five instances of inflammation of the os and cervix uteri out of upwards of 100 cases. Instances of that disease were met with every week in his (Dr. Murphy's) practice; at all events they were cases in which every symptom of inflammation was to be found. With respect to Dr. Lee's paper, he (Dr. Murphy) agreed as to the impropriety of using the instrument, and applying caustics in carcinoma uteri, as they would cause great irritation, and increase the disease. The discussion raised about inflammation and ulceration, he thought was a mere matter of words; the proper question to be believed to be, How were the inflammation and ulceration to be treated? In those cases there was a circumscribed inflamed spot, proceeding to ulceration, granulations, or the secretion of pus. How was this to be treated? Would constitutional treatment, without local applications, remove it? (Dr. Murphy) believed it would be perfectly useless. Constitutional treatment alone might be continued for years, but no advantage would follow until the nature of the local disease of the cervix were discovered, and treated locally by appropriate measures. He (Dr. Murphy) had seen hundreds of cases of uterine disease, and in seven-tenths of these there was uterine inflammation. With respect to the remarks as to the effect this proceeding on English women, he knew that every one admired the character of the sex, and parties were more sensitive to anything approaching to indelicacy or indecency; and he would ask

Society if they could believe that any gentlemen could be going about making an unnecessary and improper use of this instrument, or that they could gain the position they had in society and in the Profession if it were so. He (Dr. Murphy) could not believe it. They had derived a benefit from the use of this instrument in the investigation and treatment of disease, and they continued to employ it accordingly. He must admit, at the same time, that some unfortunate cases had occurred in the hands of those who did not know how to employ it. He believed that fatal peritonitis might follow its unskilful and injurious application. When he himself first began to pass it, he found it very difficult to distinguish a fold of the mucous membrane of the vagina from the os uteri. Now, a person applying caustic by mistake to this fold at the upper part of the vagina, where it is covered by peritoneum, might induce an attack of peritonitis in consequence, which might end fatally. But the proper application and employment of this instrument ought not to be generally condemned on this account, because unskilful, rash Practitioners might do, and have done, mischief with it.

Dr. Henry Bennet remarked, that, although there were many points in Dr. Lee's paper with which he did not agree, he considered it, on the whole, a valuable contribution to medical literature, cautioning the Profession, as it did, against the abuse of instrumental treatment. The most important feature in the essay was, in his opinion, the admission, on the part of Dr. Lee, of the existence of the inflammatory lesions of the cervix uteri, which had been described by modern writers, ulcerations in their various forms and stages. The crowded state of the meeting was also a sign of the times, as it showed the great interest which the Profession was beginning to feel in the subject. Dr. Lee's principal objections appeared directed against the asserted frequency of these inflammatory lesions,—against the use of the more severe escharotics, and more especially of potassa fusa,—and against the examination of virgins. Dr. Lee attempted to disprove the frequency of inflammatory ulceration of the cervix by the results of *post-mortem* examinations made many years ago at the Marylebone Infirmary, and more recently at St. George's Hospital, and also by instances of erroneous diagnosis which had fallen under his own observation in private practice. He (Dr. Bennet) did not admit either argument. It was a well-known fact in the history of medical science, that the most eminent pathologists often passed over important lesions without observing them, until their attention had been thereto directed; and when these researches were made at the Marylebone Infirmary, a *practical* knowledge of the inflammatory lesions of the cervix uteri did not exist in the Profession; nor did he consider, without in the slightest degree calling into question their high attainments, that the prosectors of St. George's alluded to had shown that they possessed the practical knowledge of minute uterine lesions in the living, that could alone give weight and importance to their researches on the dead. Moreover, it must be remembered, that the females in question died from general disease, without the existence of any uterine ailment having been suspected, and that the discovery of such lesions, on even a very limited proportion of their number, was of itself a clear proof of the not unfrequent existence of the disease. It was not likely that these forms of disease would be frequently observed after death, as they were not fatal. Although Dr. Bennet had seen many hundred cases of uterine ulceration within the last seven years, he had only lost one patient whilst under treatment, and that was a case of phthisis. The cases of erroneous diagnosis mentioned by Dr. Lee proved nothing at all with respect to the question at issue; but he (Dr. H. Bennet) would take that opportunity of most emphatically repudiating all connexion with those cases. Not one of them had been under his care, and he could defy the author of the paper, or any other person present, to say to the contrary. In the course of the discussion, Dr. Ashwell had denied the frequency of ulceration of the uterine neck, and had appealed to his experience at Guy's Hospital, where he had examined and treated nearly one thousand cases of uterine disease, and only met with twenty-five of inflammation of the cervix. He was sorry to say, that there was no possibility of conciliating the assertions of Dr. Ashwell with the results at which he (Dr. Bennet) had arrived, and which he had published in the second edition of his work on uterine inflammation, viz., that out of 300 cases presenting uterine symptoms, he had found 243 of inflammation, and 222 of ulceration of the cervix uteri. Either he or Dr. Ashwell must be totally wrong; there was no medium. He himself explained the discrepancy by supposing that Dr. Ashwell did not consider, at the time, that the symptoms presented by his patients warranted a specular examination, and had not, consequently, recognised the real nature of their complaint in the majority of instances. His own statistical researches were commenced because he was startled on perusing Dr. Ashwell's work, to find results which clashed so much with his experience; and he must be either right in his conclusions, or labouring under some severe form of hallucination which led him to think that he saw what in reality did not exist. He was, however, quite prepared to put his views to the most open and searching test, and challenged the Society, or any gentlemen present, to name a Committee to examine with him fifty, or a larger number of uterine patients in any hospital or institution in London, and he would accept the results. If his views were correct, they would stand such a test in any country or in any institution; and if they were false, the sooner they were proved to be so, the better. With reference to the use of severe escharotics, and principally of potassa fusa, which he congratulated himself on having introduced into British practice, they were absolutely necessary in some cases, if the patient was to be cured. At the same time, an agent as powerful as potassa fusa ought to be used with the greatest caution, and was as much capable of producing mischief in rash and unskilful hands as the knife itself. He likewise congratulated himself on having been the first to point out to the Profession the existence of severe inflammatory ulceration in the virgin, as he had thus been the means of rescuing many interesting females from a life of intense suffering, and possibly from premature death. It was a conscientious feeling of imperative duty which had first led him to overcome his own scruples, and those of his patients and friends, in these distressing cases, and he had never done so except in cases in which every other feasible means of treatment had been in vain tried, and in which the patient appeared devoted to hopeless suffering. He (Dr. Bennet) had brought with him to show to the Society the uterus of a young virgin lady of eighteen, who died of pneumonia, under the care of Mr. Anderson, his late colleague at the Western Dispensary, which presented an admirable illustration of severe and extensive ulceration, and he would ask, Would any gentleman present say, that, were his own daughter reduced to the verge of the grave by such a disease, he would object to instrumental treatment, *all other means having failed.*

Dr. Stewart said, that the gentlemen who had previously addressed the Society had spoken *ex cathedrâ:* he hoped to be excused for putting a question or two in the capacity of a learner. He wished particularly to know whether there were not, in a considerable proportion of those who presented themselves with symptoms of uterine disease, a peculiar state of the os and cervix uteri, ulceration, granular state, or abrasion,—call it by what name you will,—which got rapidly well under the use of escharotics? If there were not, he must disbelieve all his past experience. He, in common with Dr. Murphy, felt much surprised at Dr. Ashwell's statement regarding the infrequency of such cases, for, in his own limited experience, he had certainly seen fifteen or twenty, in which, around the os, there was a broken, and granular, and sometimes bleeding surface, from the size of a sixpence to that of half-a-crown. These cases, after resisting every other remedy, got well rapidly under the use of the solid nitrate. Now, he understood Dr. Lee to denounce, as a general rule, the use of escharotics in such cases; because, in his paper, he stated, that the granular cervix and os uteri very closely resembled that granular state of the conjunctiva which is produced by the abuse of escharotics. The natural inference, from this statement, seemed to be, that, as a general rule, the use of escharotics was to be avoided in the treatment of granular cervix,—a conclusion which his (Dr. Stewart's) experience, so far as it went, did not justify.

Dr. Lee, being called on by the President to reply, expressed a wish first to hear the opinion of Dr. Locock, who was present at the meeting.

Dr. Locock said, that he came to the meeting rather prepared to receive than to impart information on the question that had attracted so large an assemblage, but having been so pointedly called upon by Dr. Lee, he would not shrink from declaring his sentiments. He fully agreed with Dr. Lee in nearly every point brought forward in his paper, and highly approved of the distinctions made in the cases in which the speculum was of service in the investigation and treatment of uterine disease, and in those where it was either useless or actually mischievous. But he was not one of those who were raising an outcry against a valuable instrument, because it had been wofully and shamefully abused in the hands of a few, who had disgraced themselves and the Profession by its improper employment. There always had been, and there always will be, some unworthy characters, who, for the sake of notoriety or the lucre of gain, would stoop to such practices; and he certainly had met with many sad instances where base advantage had been taken of the necessary privacy and great unwillingness to have any fresh and strange medical men called in, incident to the delicacy of females, and where ulcerations had been purposely and artificially made with caustics, when no uterine disease had previously existed. But such practitioners were not looked upon as models, but as beacons by the Profession, and their day with the public would soon vanish. Much had been said that night of the indelicacy of the speculum, but for his part he could not consider that this was an objection worth naming, as, when properly managed, there need be no exposure of the person, any more than in looking at the throat, with a mask over the face. In his own practice, he usually placed a patient on the left side, introduced the speculum under the clothes, and then drew the clothes round the instrument, so that not the least exposure of the person took place. He had often had mothers, and even husbands present without the least outrage to their feelings. His friend, Dr. Bennet, usually placed his patients on the back; he (Dr. Locock) had often witnessed Dr. Bennet's practice, and was sure no one could take more care that there was no personal exposure. He had often witnessed much more indecency and carelessness in the practice of surgeons, in their management of diseases of that part of the frame or of the rectum, than he was in the habit of seeing among accoucheurs. With respect to the frequency of ulcerations of the uterus, so called—for, whether real ulcerations or not, all understood what was meant by the phrase,—he greatly differed from the statements of Dr. Lee and Dr. Ashwell, and he thought there was a considerable fallacy in their views. For instance, in the 1000 cases mentioned by Dr. Ashwell, where the speculum discovered only about 25 to labour under the state of the uterus alluded to, it must be remembered that these were not 1000 cases of uterine malady, but cases taken at random; and it might as well be said, that diseases of the eye were extremely rare, because, taking 1000 cases at random, in general practice, there might not be more than 25 cases of eye disease amongst them; and yet an oculist would say they were exceedingly common, because only such cases come to him, as, usually, only cases of uterine disease come to the accoucheur. In his own practice, he must say, that he considered such cases extremely common, and the touch was rarely sufficient to discover their exact character. He particularly alluded, also, to the advantage of the speculum in the management of that especial disease, first described by Sir Charles Clarke, where a peculiarly thick, glutinous, mucopurulent discharge was present. By the speculum it was seen that this discharge did not proceed from the vagina, but only from the interior of the uterus, and vaginal injections could not reach the seat of the disease, whereas it was often readily and easily cured by passing nitrate of silver within the os uteri. It is well worthy of recollection, that Sir Charles Clarke's sagacity first made out that this affection

was an inflammatory condition of the glandular structure at the cervix uteri, though he was not in the habit of using the speculum; but he (Dr. Locock) was quite sure, that had Sir Charles Clarke continued in practice, he would not have neglected so useful an instrument. He would not any longer trespass on the Society; but he must say for himself, that he was not to be deterred by the clamour raised against the speculum, owing to the very few who used it wrongly, both morally and medically, and he thought that, both for their own sakes, and for the sake of their patients, medical men were bound not to neglect any means possible for investigating and for treating disease. He had found it so valuable, that he should be sorry to be without it, though he disapproved as much as any one of its abuse; and, although he would avoid it most earnestly in unmarried women, yet there were now and then cases in which they would not be doing their duty to their patients, if they did not use it even in virgins. And after all, there was as much damage often done to a virgin by a large and a clumsy finger, as by a small speculum carefully introduced; and, as for the damage otherwise, they should remember that a young girl's purity was in the mind, and not a mere bodily inviolation.

Dr. Lee being loudly and universally called upon by the Society for a reply, rose and said:—It is now admitted on all hands, that in the diagnosis of the organic diseases of the uterus, malignant and non-malignant, and in every form of displacement of the organ, the speculum is wholly useless. In all the varieties of cancer of the uterus, not only is the speculum of no use, but it has been declared this evening to be positively injurious. It is impossible to believe that the gross mistakes respecting cancer of the uterus, described in the paper, could have been committed, if the speculum had not been employed, and the evidence furnished by the symptoms and the sense of touch had not been wholly disregarded. Such mistakes were never committed till the speculum came into use, and the sense of touch was lost. It is important for the Profession to know, that there is no difference of opinion upon this point, viz., that in all the organic diseases of the uterus, and in all the displacements, the speculum is of no use. In what diseases, then, of the uterus, may it be now fairly inquired, does the instrument furnish aid in the diagnosis? The only reply given to the question this evening is, that it is indispensable in all cases of ulceration of the os and cervix uteri from simple inflammation. From the various and important statistical documents now read to the Society, it is conclusively proved that, in 3000 uteri carefully examined after death at the St. Marylebone Infirmary and St. George's Hospital, by pathologists of established reputation, scarcely an example of simple inflammatory ulcer of the os and cervix uteri was met with. If simple ulceration of these parts existed in many cases during life, it could not fail to have been very often seen in so many uteri, taken from the bodies of women of all ages, who had died from accidents and from acute and chronic diseases. Dr. Murphy has said, elsewhere, that ulcers of the os and cervix uteri might exist during life and disappear or become invisible after death. Dr. Lee then asked, is this the case with ulcers of the mucous membrane of the stomach, bowels, or any of the other viscera, or even with the uterus itself, when it has been actually ulcerated from any specific cause. The very reverse of this is known to be the fact; and it is impossible to believe, that, if simple inflammatory ulcers of the uterus were so common in the living body as has been represented, that they should be invisible in the dead. But the truth is, they do not exist in the living, and therefore they cannot be seen in the dead body. In the whole course of his professional life, he had never seen a distinct simple inflammatory ulcer in the living subject, although he had very frequently employed the speculum since 1827; in fact, in all cases where he could not form a decided opinion of the disease by the ordinary mode of examination, and where he thought the sense of sight would assist in the diagnosis. Dr. Lee held it to be wrong, in any case, to employ the speculum where the nature of the disease could be clearly determined by the sense of touch. A gentleman, this evening, has asserted, that Dr. Lee has denounced the speculum in all cases; but he could not have listened to the paper when it was read, otherwise he must have heard that his great object in the communication to this Society was to define and make known the legitimate use and real value of the instrument in practice. It was equally erroneous to assert, as had been done, that the application of caustic and escharotics of every kind to the os uteri had been denounced. Dr. Lee then stated, that sixteen years ago he had described, in the "Cyclopædia of Practical Medicine," under the title, "Inflammation of the Follicles of the Os Uteri," the disease which was now erroneously called ulceration of the os and cervix. In the article in question, reference is made to the work of Madame Boivin, who had before described the disease under the title, "Granular Inflammation of the Os Uteri." Dr. Lee said, he had not described simple inflammatory ulceration of the os and cervix uteri, because he had never seen it, and he believed it rarely, if ever occurred, and that the Profession in this country had been grievously misled by Dr. Bennet on the subject. There was no end to the cases now coming under his observation, especially in young hysterical women, where the speculum and caustic had been employed for months, and where there was no ulceration, and where no ulceration or any other organic disease ever had existed. Dr. Lee even believed that Dr. Bennet himself had never seen simple ulceration of the os and cervix uteri, although he was now disposed to take so much credit for having been the first to describe what he erroneously supposed had escaped the observation of all preceding pathologists. Dr. Lee formed this opinion from Dr. Bennet's own published description of these supposed ulcers of the os and cervix uteri, which he read to the Society; it was as follows:—"The margin of an inflammatory ulcer," says Dr. Bennet, "is scarcely ever, if ever, either everted or inverted." "So much is this the case, that it is generally most difficult to say where the ulceration finishes, until, by the application of the nitrate of silver, the margin of the sore, or point where the epithelium finishes, be revealed." "It is always on a level with, or above the non-ulcerated tissues that limit it: its margin never presents an abrupt induration. Owing to this circumstance, it is always impossible to determine by the touch the precise point at which the ulceration terminates." Dr. Bennett does not know, he merely asserts, that the epithelium finishes at the edge of the imaginary ulcer. Is he certain that the epithelium does not remain, and by a state of morbid thickening give rise to the appearance of an ulcer, "which," he says, "is always on a level with, or above the non-ulcerated tissues that limit it." Undoubtedly the mucous membrane in most of these cases is unusually vascular and thickened, and he (Dr. Lee) would not be surprised if it were to be found that the epithelium is present, and thickened also. What would be thought, Sir, said Dr. Lee, addressing the President, of a surgeon who could not tell whether an ulcer existed on any organ of the body, without the application of such a test; who would say to his patient, let me first rub the part with lunar caustic, and then I will tell you whether an ulcer exists or not. Dr. Bennet's ulcer cannot be recognized by the sense of touch, for it has no margin, inverted or everted; it cannot be seen through the speculum till the part has been rubbed with nitrate of silver; it has neither centre nor circumference, beginning nor end. Dr. Lee here sat down amidst the most enthusiastic cheering from the whole assembly.

CORRESPONDENCE.

INSULT ADDED TO ABUSE.

[To the Editor of the Medical Times.]

SIR,—On Monday last Mr. Membury Wakley, the Deputy-Coroner, held an inquest in the Students' Room of University College Hospital. As is usual at such times, several of the Students were present; but, to our great surprise, Mr. Wakley, in no pleasant manner, requested all strangers to retire under pain of immediate arrest, for which purpose he had several policemen present and in the neighbourhood of the College. The Students, of course, remonstrated with him, but threatened imprisonment was the only reply. The Students showed their disapprobation of his conduct in such a manner as rather astonished this fiery Deputy.

It appears very evident, then, that when the *Lancet* so grossly and falsely attacks University College, it is not to benefit the Institution—it is not to benefit the Students—but to ruin and insult both. The Students have now their eyes open, and find their pretended friend is their greatest enemy, and intend, henceforth, to renounce their connexion with both father and son, and to rally round the Institution and its Professors for the sake of the glory it once diffused over the medical world.

Yours respectfully,

A THIRD YEAR'S STUDENT.

DR. TODD'S LECTURES.

[To the Editor of the Medical Times.]

SIR,—Your remarks, "unless the impression be so powerful as to excite a considerable physical change in the centre of sensation, which of itself is sufficient to disturb the intellectual centre," fully convey the qualification which Dr. Todd's observation appeared to me to require. Let the mind be ever so deeply engrossed, I apprehend that if a jar, containing sulphuretted hydrogen, were placed at that time under the nose, we should be conscious of it.

I am, Sir, yours faithfully,

ALFRED MARKWICK.

19, Langham-place, June 1, 1850.

THE RELATION OF TRUE MEDICINE TO EMPIRICAL SYSTEMS.

"A professed Homœopath, although legally qualified to practise medicine, ought not to be met in consultation or joined in attendance upon a case; but the patient ought not to be deserted."

[To the Editor of the Medical Times.]

SIR,—Permit me to thank you for your able and useful leader in defence of an Article which I had the honour of communicating to the *British and Foreign Medico-Chirurgical Review*, on "The Relation of True Medicine to Empirical Systems." As I think the dignity and interests of our common Profession ought to be scrupulously guarded from any injury that might arise, either from misrepresentation or misapprehension on so important a question, I request the favour of a short space in your Journal for an explanation of my views on one or two points of Medical ethics, which *have been* misunderstood and misrepresented.

Firstly,—As to the question of acting in consultation, or in joint attendance with a duly qualified, but *professedly* homœopathic Practitioner. On this point my opinion is decided. If a regularly-educated and legally-qualified Practitioner *publicly professes* that he treats disease homœopathically, to the exclusion of all other methods of treatment, in virtue of that public profession he becomes a charlatan, and should be treated as such; consequently, he neither ought to be met in consultation nor associated with in attendance upon a case.

Secondly,—If a patient insists upon being attended by a charlatan, ought the Practitioner in attendance to desert him? I think not. When another, but a regular Practitioner, is called in, and no consultation or joint attendance is requested by the patient, Medical etiquette requires that the Practitioner thus superseded should gracefully take his leave, and cease all interference whatever with his former patient; but the charlatan is *without the pale* of Medical etiquette, and, as the patient may suffer serious and even irreparable injury by a charlatanic method of treatment, the Practitioner is justified in interfering by this consideration alone. A case of death from inanition, the result of a homœopathic method of treatment, has actually occurred. Life has also been extinguished by *pretended* homœopathic, but really large and poisonous doses of drugs; and the proceedings generally of the charlatan, although not directly fatal in their results, may seriously injure the health of the patient, or inflict unnecessary and cruel suffering, or be of a swindling character. In these and numerous other circumstances, the Medical Practitioner will best fulfil his honourable and benevolent mission, by a careful supervision of the proceedings of the quack, and by a prompt rescue of his patient, if possible, from impending danger. The drugs or pretended medicines should be carefully examined and analysed, if necessary, from time to time; notes of the case should be regularly taken; and, if death be imminent from inanition or other

violent methods of treatment, or if some cruel or brutal operation be proposed or attempted, whereby much suffering or mutilation will be inflicted, or if the whole affair be a swindle, due notice of these circumstances should be given, not only to those morally responsible for the employment of the quack, but also (if requisite for the *prevention* of the mischief) to the police authorities; in either case leaving the duty of *prosecuting* the offender to those upon whom it properly devolves. All this should be done without any communication whatever with the charlatan concerned, to whatever class he may belong.

Thirdly. If the observation of a case treated by a charlatan can be made available to the advancement of the art and science of Medicine, ought the Practitioner to render it available? I think he ought. It has been the uniform practice of the Profession, from time immemorial, to neglect no proper opportunity of adding to its knowledge; and the opportunities afforded by other crimes against society, over which *the Practitioner has, and can have, no control*, as murders, suicides, personal injuries, &c., have been continually made available, as being proper to this end. It was on this principle alone, that that degrading practice which brought the anatomist into contact with the executioner, of accepting the bodies of executed criminals for dissection, could be justified; but in the present case, we may learn from the malapraxis of the numerous varieties of empirics which prey on society, without coming into any degrading contact with them at all.

I shall feel obliged by the insertion of this explanation of my views in your next number; and I also beg leave to remind the Editor of the *Lancet*, that it is due to his sense of justice, and to the Profession at large, to re-publish it in *his* Journal.

I am, Sir,

THE WRITER OF THE ARTICLE ON "THE RELATION OF TRUE MEDICINE TO EMPIRICAL SYSTEMS," IN THE "BRITISH AND FOREIGN MEDICO-CHIRURGICAL REVIEW" FOR APRIL LAST.

[We do not think it necessary to add a word to the above excellent letter. It exonerates us from the necessity of replying to an article which appeared in last week's *Lancet*. We shall only add, that we agree with our correspondent in thinking that, if Mr. Wakley *has* any "sense of justice," either towards the man he has calumniated, or to the Profession, he will republish the letter.—ED. *Med. Times.*]

[To the Editor of the Medical Times.]

SIR,—Not having seen the "Articles in the *Lancet* on the Ethics of the *Medical Quarterly*," to which you alluded on Saturday last, you will, perhaps, kindly permit me space in your Journal to offer some unbiassed remarks; for, whilst I fully agree with you as to the unadvisability of rending, by hypercriticism, the body catholic of our Profession, I cannot shut my eyes to the fact, that at least one portion of the anti-homœopathic Article, in the *Medical Quarterly*, is of rather a questionable character, and that that portion against which, in my opinion, strong objections lie, is, I regret to say, one of those noticed in your leading Article of last week.

At page 307 (No. X.) of the *Medical Quarterly*, the following passage occurs:—"Much experience is to be gained from the proceedings of all these empirics; and a Practitioner is not justified in abandoning his patient if one of the class be called in; *he may*, therefore, *still continue his attendance* and watch the progress of the case." Now it appears to me, that if we were to follow this advice, we should at once countenance alike the empiricism and the empiric; for, as I cannot suppose that we are recommended, in the passage quoted, to act the ignoble part of a spy,—to note the natural changes of untreated disease, without the knowledge and consent of the empiric "called in,"—I am forced to conclude that we are recommended to do violence to the usages of regular practice, and to meet, in consultation, a quack! for I consider that he most merits that name who, under the cloak of a professional diploma, or license, practises empirically.

"Every man duly authorised has," as the article in question submits, "the undoubted moral right to practise his art to the best of his judgment; and if he decide to practise it homœopathically, or hydropathically, or mesmerically, we do not see on what grounds he should be prevented," (p. 304;) but, because his judgment errs, and he, in consequence, is pleased to exercise his right of practising empirically, is the regular Practitioner to be expected "to watch the progress of a case" with such a man? No; the Profession, by common consent, agree to scout such a one, and they decline to meet him even under the circumstances brought forward as inducements for doing so by the Author of the Article in the *British and Foreign Quarterly*.

In support of this strange position, that the regular Practitioner is to continue in attendance with the empiric, a paragraph is quoted from Percival's *Medical Ethics*. But Percival never intended to be placed in such an alliance; the quoted passage has reference *solely* to patients who are "bent on having recourse to quack medicines," and bears no relation whatever to quacks themselves. To show its inapplicability, it is merely necessary to requote the paragraph, which runs thus:—"The use of quack medicines should be discouraged by the faculty, as disgraceful to the Profession, injurious to health, and often destructive even of life. Patients, however, under lingering disorders, are sometimes obstinately bent on having recourse to such as they see advertised or hear recommended, with a boldness and confidence which no intelligent Physician dare adopt with respect to the means that he prescribes. In these cases some indulgence seems to be required to a credulity that is insurmountable; and the patient should neither incur the displeasure of the physician, nor be entirely deserted by him. He may be apprised of the fallacy of his expectations, whilst assured at the same time that diligent attention should be paid to the progress of the experiment he is so unadvisedly making on himself, and the consequent mischief, if any, obviated as timely as possible."

Whilst I am not wishful to deny the general statement, that the regular Practitioner—the observer of pathological phenomena—might derive information from noticing the natural course and termination of untreated disease, as exhibited in homœopathic practice, I am anxious to see discountenanced any recommendation which might afford a pretext to such of our Profession who, from circumstances, might be inclined or induced to meet in consultation a self-acknowledged and recognised homœopath. Instead, therefore, of sanctioning, the Profession, with one voice, ought to repudiate any approach to the notion, that the regular Practitioner ought, or rather can, without dishonour to himself and to the Profession, "continue his attendance, and watch the progress of a case" after an "empiric" has been "called in."

The Article under consideration in the *Medical Quarterly* appears to me, if taken generally, calculated to do good; but the incongruity of propounding in it such a heterodox opinion as the one animadverted upon, is, to say the least of it, curious; and that the more especially, as we find in the immediately preceding pages many excellent quotations from the "American Code of Medical Ethics;" with one of which it may not be out of place to conclude this already perhaps too lengthy letter. It is this:—"A regular medical education furnishes the only presumptive evidence of professional abilities and acquirements, and ought to be the only acknowledged right of an individual to the exercise and honours of his Profession. But no one can be considered as a regular practitioner, or a fit associate in consultation, whose practice is based on an exclusive dogma, to the rejection of the accumulated experience of the Profession, and of the aids actually furnished by anatomy, physiology, pathology, and organic chemistry."

I beg to remain, Sir, yours very obediently,

June 5th, 1850. JAMES INGLIS, M.D.

HEALTH OF LONDON DURING THE WEEK, ENDING JUNE 1.

The public health, as indicated by unusual lightness of the bills of mortality, bears at the present time a favourable appearance. The mortality is low, not as compared with that which prevails in places of better sanitary condition, but with what has been commonly observed in London at the same period of former years. The deaths registered in the week ending last Saturday, were 736; in the twenty-second week of the ten years 1840-9, they rose from 760, which was the lowest number, and occurred in 1842, to 960 in 1847; the average was 860, or if corrected for increase of population, 938; the present decrease on which, therefore, amounts to 202. The deaths from diseases of the respiratory organs, exclusive of consumption, were only 105, against 138 in the previous week; the average is 113. Consumption carried off 103 persons, the corrected average being 153, and the lowest number in any corresponding week having been 118. The deaths enumerated in the class of zymotic or epidemic diseases were only 130, against 156 of the week previous; the corrected average of ten corresponding weeks is 190. Six children died of small-pox, 11 children and a private of the Grenadier Guards, aged twenty-three years, of measles, 17 children of scarlatina, 28 of hooping-cough, and 26 persons of typhus; all of these epidemics showing a decrease, especially the three first mentioned. Diarrhœa was fatal to 15 persons, 9 of whom were children, the average being 10; this is the only epidemic amongst those that frequently prevail to a considerable extent, which does not show a decrease on the returns of corresponding weeks. Two persons died of influenza; and 2, both adults, of purpura. At 11, Brown's-place, Shacklewell, the son of a plasterer, aged three years, died of "scarlet fever, aggravated by effluvia from certain cesspools which they were emptying." An inquest was held on this case, the child having had no medical attendance. Mr. Martin, the Registrar for St. James, Bermondsey, states that "he never knew his locality so healthy as at present; the mortality has been very low for several months; no zymotic diseases prevail; the drainage is improved, the pavements in excellent condition, and cleansing has not been interrupted. But the tidal ditch is the great plague-spot of the district, and last week men have been casting the decayed vegetable matter and surface mud on the banks, from which arises effluvium the most disgusting, and especially dangerous under the temperature which prevails at the present time. The process cannot be completed for some weeks, persons residing on the banks are already suffering, and it is intended to cart the noxious slime to a dust-heap nearer the City." It is reported that a man of 36 years, who had disease of the heart, was fishing in the New River, and captured "a jack;" and that the excitement attending his success caused a fit of apoplexy, from which he never recovered.

The deaths in the several hospitals of London occurred as follow:—

GENERAL.		Sussex & Brandenburgh-house (Fulham) ...	0
St. George	2	Northumberland-house	1
Westminster	3	Whitmore House ...	0
Grey Coat Hospital ...	0	Pembroke House ...	0
Charing cross	1	St. Luke	0
Middlesex... ...	0	Miles'	0
University College ...	0	Warburton's	4
Royal Free Hospital ...	3	Lunatic Asylum, Bow ...	0
King's College	4	Bethlem	5
St. Luke, City-road ...	0	Lunatic Asylum, Brixton	0
St. Bartholomew... ...	6	Retreat, Clapham ...	0
London	2	York House, Battersea ...	0
Guy's	5	New County, Wandsworth	1
St. Thomas	5	Peckham House ...	0
Bethlem, London-road...	0	Camberwell House ...	1
FOR CONVICTS.		LYING-IN.	
Hospital Ship, Unité ...	0	Queen Charlotte's ...	2
Penitentiary Hospital, Millbank	0	British	0
MILITARY AND NAVAL.		City of London	0
Royal Hospital, Chelsea (South)	1	Hospital, York road, Waterloo 2nd part ...	0
Royal Hospital, Greenwich (East)	8	FOR PARTICULAR CLASSES.	
Royal Military Asylum	0	Female Servant Invalid Asy., Stoke Newington	0
Coldstream Guards Hos.	2	German Hospital... ...	1
Grenadier Guards' Hospital	2	French Hospital	0
Scots Fusilier Guards ...	0	Portuguese Jews' Hospital	0
Royal Ordnance	4	German Jews' Hospital	0
Dreadnought Ship ...	1	FOR SPECIAL DISEASES.	
LUNATIC.		Small Pox	0
Kensington House ...	0	Fever Hospital	1
Munster-house (Fulham)	0	Lock	0
Normand-house(Fulham)	0	Consumption, Brompton	2
Otto-house (Fulham) ...	0	Opthalmic, Charing Cross	0
Blacklands-house ...	0		

TOTAL, 66.

The following is the number of Deaths occurring from some of the more important special causes:—

Apoplexy	24	Heart	30	Phthisis	103
Bronchitis ...	44	Hooping-cough	28	Pneumonia ...	42
Cholera.....	...	Hydrocephalus	31	Scarlatina	17
Childbirth	2	Influenza	2	Small-pox	6
Convulsions...	32	Liver	9	Stomach	1
Diarrhœa	15	Lungs	8	Teething	9
Dropsy	12	Measles	12	Typhus	26
Erysipelas ...	7	Paralysis	20	Uterus	...

BIRTHS AND DEATHS.

	Births.	Deaths.	Births over Deaths.
Males	677	343	334
Females	697	393	304
Total.....	1374	736	638

MORTALITY TABLE.

Deaths in the Week ending Saturday, June 1, 1850.
(Metropolis.)

Causes of Death.	Total.	Average of Ten Weeks.
All Causes	736	860
Specified Causes	736	855
Zymotic (or Epidemic, Endemic, and Contagious) Diseases	130	174
Sporadic Diseases:		
Dropsy, Cancer and other Diseases of uncertain or variable seat	42	46
Tubercular Diseases	149	188
Diseases of the Brain, Spinal Marrow, Nerves, and Senses	115	107
Diseases of the Heart and Blood-vessels	34	31
Diseases of the Lungs, and of the other Organs of Respiration	105	104
Diseases of the Stomach, Liver, and other Organs of Digestion	47	56
Diseases of the Kidneys, &c.	11	8
Childbirth, Diseases of the Uterus, &c.	8	9
Rheumatism, Diseases of the Bones, Joints &c.	7	8
Diseases of the Skin, Cellular Tissue, &c.	3	1
Malformations	4	4
Premature Birth and Debility	19	20
Atrophy	16	12
Age	34	48
Sudden	6	11
Violence, Privation, Cold, and Intemperance	11	24
Causes not Specified	...	5

METEOROLOGY OF THE WEEK.

Day.	Barometer.	Thermometer. Dry.	Dew Point.	Difference between the Mean Temperature of the day and the same day on an average of 7 years.	General Direction of Wind. A.M.	General Direction of Wind. P.M.	Amount of Horizontal Movement of the Air.	Rain in Inches.	Electricity.*
Sunday	29·554	55·3	49·1	— 1.2	S.S.W.	S.W.	Miles. 140	0·07	Nothing was shown at any examination.
Monday	29·592	55·5	50·7	— 1·1	S.S.W.	S.W.	160	0·03	Nothing was shown throughout the day.
Tuesday.....	29·944	55·6	48·8	— 1·3	S.W.	S.W.	105	0·26	Negative, and very active at 3 p.m.
Wednesday.	30·072	59·9	50·0	+ 2·5	S.S.W.	Calm.	50	0·00	Nothing was shown throughout the day.
Thursday ...	29·903	57·4	52·8	— 0·5	E.	E.	85	0·00	Nothing was shown throughout the day.
Friday	30·019	62·9	51·5	+ 4·5	N.E.	E.	73	0·00	Positive, and tension weak at noon and 3 p.m.
Saturday ...	30·179	61·1	50·1	+ 2·3	N.E.	E.	85	0·00	Positive, with tension strong throughout the day.
Mean ...	29·895	58·2	50·4	+ 0·7			sum 690	sum 0·36	

* In this Column, A. stands for Active; N. for Negative; and P. for Positive.

MEDICAL NEWS.

Royal College of Surgeons.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at the meeting of the Court of Examiners on the 31st ultimo:—Messrs. Albert Fleming, Calcutta; John Berry, Leyland, Lancashire; Charles Johnson, Dublin; Henry William Bromley, Rippingale, Lincolnshire; Arthur Scatliff, Sloane-square, Chelsea; James Stoate, Bristol; George Henry Kirkpatrick, Whitchurch, Salop; and Ryse Saer Thomas, Narbeth, Pembrokeshire.

Apothecaries' Hall.—Names of gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, 30th May, 1850:—Thomas Coke Higgs, St. George's, Bermuda; Charles Joseph Bullock, Congleton; Henry Allen Aldred, Blackfriars-road.

Military Appointments.—50th Foot. Assist.-Surgeon John Clay Purves, M.D., from the 94th Foot, to be Assistant-Surgeon, vice Stoney, who exchanges.—94th Foot. Assistant-Surgeon A. A. Stoney, from the 50th Foot, to be Assistant-Surgeon, vice Purves, who exchanges.

Naval Appointments.—Assistant-Surgeon John Ternan (1841) and R. D. Pritchard (1841) to the Centaur steam frigate, on the coast of Africa; W. F. Noott (1841) to the Victory flag-ship at Portsmouth. Richard Douglas, surgeon (1831), and William Webber, M.D. Assistant-Surgeon (1841), to the Albion. Henry F. Williams, M.D., Assistant-Surg. (1845) to the Agincourt. Assistant-Surgeon George J. Willes (1844) to the Dolphin, at Sheerness.

Obituary.—At No. 3, Baxter-place, Edinburgh, 25th ult., Adam Warden, M.D., F.R.C.S.E. At Durham Bank, Lasswade, 10th ult., W. Peatie, Esq.; Surgeon R.N. At Blackburn, 21st ult., John Boag, Esq., Surgeon, of Glasgow. On the 27th ult., Charles Wellington Kent, Esq., formerly Surgeon to the Surrey Dispensary, aged 35. On the 27th ult., in Dublin, Staff-Surgeon Copeland Grattan, Esq., late of the 65th Regiment. On the 30th ult., at the vicarage, Chesham, Bucks, Henry Aylward, Esq., surgeon, of Chiselhurst, Kent. On the 27th ult., Mr. Hale, resident dispenser at the Eastern Dispensary, by suicide. He destroyed himself with prussic acid. On the 9th of April, at Umballah, in the East Indies, William Veal, Esq., Assistant-Surgeon, H.E.I.C.S.

Memorial to Sir George Grey.—The undersigned Surgeons in general practice at Dorking, have addressed a Memorial to Sir George Grey and a Petition to the House of Commons, urging the necessity of reform of the Profession; and they state that, in the accomplishment of any such measure, they have so little confidence in the existing Colleges for such educational and other arrangements as are necessary to sustain and elevate their class of the Profession, that they have no alternative but to pray the Legislature to grant an Act for the incorporation of the General Practitioners into an independent College.—William Chaldecott, William Hart, George Curtis, Thomas Napper, Gust. Irvin Knight.

Parochial Liberality!—The Marylebone authorities, in revising their dietary, have decided to allow the House-Surgeon, the Surgeon to the Workhouse, the two Assistant-Surgeons, and the two Dispensers, in common with the Master and Matron, and principal nurses of the Infirmary, each 7lbs. of uncooked meat, 5lbs. of bread, 5lbs. of potatoes, 10½ pints of porter, 2 pints of milk, and *three shillings* a week, not as pocket-money, but to provide tea, sugar, cheese, butter, and all other extras. The extreme calculation in the odd half-pint of porter shows the great caution of the vestry! Should a vacancy occur in any of the professional appointments, the rush of candidates to obtain the berth will be tremendous. To speak seriously, such a proceeding is disgusting in the extreme. Dieting professional men as they would do paupers—Bah! This is, we suppose, the result of the infusion of new blood into the vestry. If the Medical Officers do not resign in a body, they will be traitors to their Profession and their position as gentlemen; and if the tradesmen of Marylebone (we include the M.P.s who voted in favour of the movement) succeed in obtaining candidates for the then vacant berths, before this disgraceful resolution is rescinded, we earnestly trust that every medical man will refuse all communication with the Ichabods.

Cure for Cholera.—Dr. Macrae, a civil surgeon at Howrah, is reported in the *Indian Times* to have cured fifteen cases of cholera by the inhalation of oxygen gas. A report of this kind, coming through a newspaper medium, has but little value attached to it. We should be glad, nevertheless, if some of our Indian subscribers would furnish us with additional information on the matter, as it is a subject of great importance and interest.

Charing-cross Hospital.—During the last year, 18,500 persons were attended, 1116 being in-patients, 17,384 out-patients. The receipts were 2285*l.*, which, with a balance of 597*l.*, made a total of 3,882*l.* The expenditure was 2535*l.*, leaving a balance of 347*l.*

The Corporation of Paris has voted a considerable sum towards the establishment of public baths and washing-houses, on the London plan. Similar establishments are about to be opened at Brussells, under the patronage of the Board of Health.

We have received a sample of the improved Bedding Protector of Messrs. Greenhill, Fry, and Co. This sheeting is said to be quite impervious to water, grease, acids, or other fluids—has no effluvium whatever—can be sponged and rubbed dry immediately. It is, therefore, well adapted for the preservation of bedding under all circumstances, but more especially in medical and surgical cases, and can be advantageously employed for operators' or nurses' aprons. It is soft, pliant, apparently durable, and not likely to crack; easily cleansed, and not affected by hot water. We recommend it to the notice of our readers.

Etherification.—Professor Graham states that, by submitting a mixture of one volume of sulphuric acid, and four to eight volumes of alcohol of 83 per cent., in a closed tube, to a temperature of from 284° to 317°, ether is formed, which rises to the surface of the fluid, without the formation of sulphovinic acid, or any charring. Crystals of bisulphate of soda, with an excess of acid, answer the same purpose. By decreasing the proportion of acid, the product of ether is greatly diminished, charring takes place, and sulphovinic acid is generated. Professor Graham, therefore, considers that the process of etherification is attributable to the contact theory so ably advocated by Mitscherlich.

TO CORRESPONDENTS.

"M., Richmond."—Dr. Chambers differs with Liebig, we believe, as to oil not forming part of the diet of people of hot countries. Every other page of the Bible refers, he says, to the East as a "land of oil, olive, and honey;" and among the Hindoos at present, "as good as ghee" (fat) signifies all to be desired. A curious point has been referred to by Dr. Chambers: that not till puberty do women wish for fatty matters in their food. Pancreatic juice is what dissolves fat. There are several Indians in town at present, in the train of an Indian Prince; perhaps our Correspondent might be made clearer on the point, by making out their *habitat*.

"Tyro."—Nitric acid may be solidified with sulphur; and in this form it has been tried by Rognetta in fungoid bleeding tumours, in several scrofulous affections, and even incipient cancer; in all which the Italians look on it as quite a specific.

"Rachis, Jersey."—Mayer, of Mainz, denies the existence of the disease; while Griffin and many others have described it minutely; among the rest Paton, in the current number of the "Edinburgh Medical and Surgical," enters into considerable detail. Valentin has shown, that irritation of the spinal chord affects the movements of the œsophagus and viscera of the abdomen, through the sympathetic; that even contractions may be produced in the stomach by irritating the cervical or thoracic nerves.

"Dr. Sheridan Muspratt's" able paper, as to the identity o the two ethyl acids, bisulphethylic and hyposulphethylic, and the two methyl acids, bisulph and hyposulphamethylic acids, has been received. His researches on these very unsavoury compounds deserve great credit; and if he would only cut down a little more of the jungle of organic compounds and organic radicals, that we might see our way in organic chemistry, he would be doing a public good.

"H. J., Guy's."—Matteucci does not believe the source of luminousness in the glow-worm to be phosphorus,—it is not under the animal's will. He describes a singular globular matter engaged in the process, (perhaps the bursting of a graafian vesicle.) 2. Yes, in Berlin. 3. An antidote to strychnine is said to exist in sulphuret of antimony. Nux vomica is not an unusual remedy in "hay fever," in dyspepsia, and several other diseases.

"Lex Talionis."—We have read, of course, the case of quackery at Oldham, and the charge of the learned (!) judge. If it be the law, as thus laid down, that a quack cannot be found guilty of killing a man till *mala fides* is proved, the sooner the law is changed the better. The only person, in fact, now capable of being prosecuted is the well-qualified man.

"Inquirer, St. George's."—Two parts of ether and one of chloroform make a very good mixture for inhalation. It has been used most extensively in America and in this country. In the paroxysm of asthma, in delirium tremens, and puerperal convulsions, it is spoken of very highly.

"G. A., Belfast."—The opinion that goitre arises from magnesia in waters originated, we believe, with Inglis, some ten or twelve years since, from the fact of the disease being common wherever dolomite—a magnesian rock—existed in Yorkshire. So that Grange's opinion is perhaps not new.

"Inquirer."—Apply to the Secretary of the National Institute, Hanover-square.

"Juvenis."—The only pay of an Assistant-Surgeon in the army is 7*s.* a-day and quarters.

"C. D."—Any surgeon of respectability.

"Mr. Dotell" will receive our early attention.

"A Well-wisher to University College," with his card enclosed, reached us too late for this week's Number.

ORIGINAL LECTURES.

LECTURES
ON
CLINICAL MEDICINE.
DELIVERED AT UNIVERSITY COLLEGE HOSPITAL.

By E. A. PARKES, M.D., Lond.:

Member of the Royal College of Physicians, Professor of Clinical Medicine in University College, and Physician to the Hospital.

LECTURE IX.

Idiopathic Enlargement of the Spleen.—Presence of an unusual number of White Corpuscles in the Blood.—Chemical and Microscopic Examination of the Blood.—Chemical Examination of the Urine, &c.

GENTLEMEN,—Attention has of late years been directed to a peculiar condition of the blood, in which an extraordinary number of pale corpuscles, strongly resembling, or being actually identical with, the ordinary white corpuscles, either form in the blood, or pass into, and are detected in it. This condition (in its intense degree,) has been at present witnessed only in connexion with disease of the spleen, or (in one case) with disease of the lymphatic glands. We have had lately in hospital an example of this affection coincident with spleen disease, and as, on many accounts, the subject is one of extreme interest, I shall bring its chief characteristics to your notice. It is by the observation of such cases as these, in which the ordinary operations of the body seem to be reversed or suspended, that pathology tends to throw such light on the healthy processes, the nature of which is often best detected by the study of the deviations from them.

Johanna Sheen, aged 69, admitted December 13, 1849; an Irishwoman, but has lived in London sixteen years. A fruitseller in the streets; much exposed to cold and wet; never has drunk spirits or smoked; has always lived well; has taken meat every day, except on Fridays, and a little beer. Appears never to have had any serious illness; never had ague, or anything which seems to imply any kind of malarious disease. Towards the end of 1848 was in St. Bartholomew's Hospital for swelled feet and legs, but was discharged well in a fortnight. Shortly after discharge, she began to feel severe pain in the left side low down, and one day, on examining the side, she found a considerable swelling below the false ribs on the left side. She had no shivering, sickness, or fever. She then, January, 1849, entered University College Hospital under Dr. Williams; at this time she was thin, weak, with a yellow skin but clear conjunctivæ; with a large and tender swelling extending from the margin of the left false ribs to the crest of the ilium; for which she was treated with blisters, iodide of potassium, and morphia to relieve the pain, which appears to have been severe. The urine at this time was non-albuminous; at first alkaline and with phosphates, afterwards acid, and with deposits of uric acid and lithates. She had, on several occasions, morning sickness, and vomited a little blood. She left the hospital at the end of February, feeling stronger and easier, but with the tumour undiminished in size. She continued at her occupation till November, when she was knocked down by a cart, the wheel of which, according to her account, passed over the pelvis. She seems to have suffered severe pain in the abdomen from this accident, and was unable to leave her bed for four weeks. When she was able to walk she came down to the hospital and became an out-patient of Dr. Jenner's, who, on discovering the nature of her complaint, was kind enough to send her into the hospital. On admission, on the 13th December, 1849, we found her thin and shrivelled, without œdema or enlargement of veins; there was a peculiar dusky, yellowish-brown colour of the skin, most evident on the trunk, and less marked on the face and extremities; the conjunctivæ were clear; there were no head symptoms: and no pulmonary symptoms, with the exception of a little dry friction low down on the left side; there was a feebly acting heart, in its right position, and without bruit; the pulse was 72, regular; the radials not visible. A large tumour, evidently an enlarged spleen, filled the left side of the abdomen, descending from the lower border of the seventh rib, nearly to the ilium, bulging into the posterior left lumbar region when she lay on her back, and reaching nearly to the umbilicus on the right; falling over considerably to the right of the umbilicus when she lay on the right side; with a prominent, ridged, smooth lower border; very hard throughout, and tender; the extreme length of the dull percussion-note was 8 inches; no splenic murmur was ever audible. The height of the hepatic dulness (vertical line from nipple) was 4¼ inch; the lower edge was 1¾ inches below the false ribs; to the left of the middle line the hepatic dulness confounded itself with the splenic, that is to say, with the dulness of the tumour. There was no fluid in the peritonæum, no nausea; the appetite was good, the tongue clean; there were no intestinal or uterine symptoms.

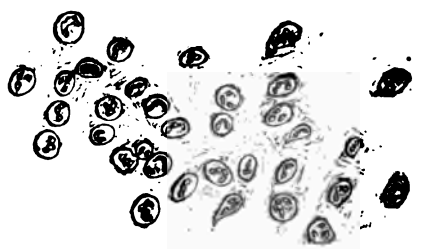
She had had no epistaxis at any time; no hæmoptysis; a little hæmatemesis, apparently, when she was in the hospital previously; no melæna, hæmaturia, or mennorrhagia.

During the patient's stay in Hospital, viz., till the 17th of March, she remained nearly in the same condition. Occasionally she suffered from severe frontal headaches; she also had, on several occasions, sharp stabbing pains in the abdomen, both over the spleen and liver, for which leeches were applied, the bleeding from which was profuse and not very easily arrested. On four or five occasions, also, she had moderate shivering, followed by heat and sweating; these attacks were not very regular, seemed to observe no certain times, and were separated from each other by long intervals. On the 27th of February, according to her own account, she passed a pint of blood with a stool; but this, and another stool passed subsequently, were thrown away accidentally, and were not seen by any one; the next stools were free from blood. With this exception, she had no bleeding from any part of the body, and none into the substance of the skin.

On the 17th of March the patient left the Hospital, nearly in the same state as on admission.

Such were the chief points we could make out respecting the condition of the patient's organs, and the symptoms she usually presented. Let us now consider the condition of the various fluids and excretions.

1. *The Blood.*—The blood was examined microscopically many times, a drop of blood being taken from the end of the finger for this purpose; the appearances noted were always the same, and, therefore, I can combine all our observations into a single description. When the drop was put under the microscope the red particles appeared to behave as they do in a state of health; they ran together in the usual time and formed rouleaux; they did not appear altered in size or form, and in fact presented no appreciable deviation from the healthy standard. But interspersed among the meshes formed by the rouleaux were an immense number of pale corpuscles; on many occasions, when examined with a power of +350 there were at least from 240 to 300 of these corpuscles in the field at once; at least 60 were counted in a quarter of the field on one occasion, and 60 in a sixth of the field on another; and these were not all. At other times they were rather fewer in number, perhaps from 100 to 120 in the field. They were very variable in size, ranging from a size three or four times as large as a red particle to a size hardly larger than a red particle. The majority, however, were large. They differed considerably in transparency, some being very opaque, comparatively dark coloured, and slightly granular on the surface; others were more transparent and smoother. As a general rule the larger ones were darker and more granular looking; the smaller more transparent. They were round or slightly oval; some few were indented on the side. Nuclei could not be seen in the larger darker cells without re-agents, but in some of the cells there appeared to be an aggregation or collection of the granular contents at one particular point which was generally at the side. In the transparent cells nuclei were very indistinctly seen. Acetic acid dissolved the opaque contents, made the cell-wall transparent, and in every case brought out nuclei. The nuclei were small for the most part, were very well defined with dark borders, slightly oval, seated generally eccentrically, but sometimes towards the centre, and were in variable number from one, or more usually two, to four or five. Often there was a single nucleus of a horse shoe or reniform shape, deeply indented, as if it were about to cleave into four or five smaller nuclei; in other cases there was a crescent-shaped nucleus, with no apparent tendency to those indentations or divisions. In many cases, if a reniform or crescent shaped nucleus, with the deep indentations, had separated into smaller parts, each separate part would have accurately corresponded in size and appearance with the smaller separate nuclei which were seen in other cells. In some cases the small oval nuclei were crowded together eccentrically so as to make the cell look very much like some pus cells. You will see many of these points very well shown in this drawing, which Mr. Henry Thompson was kind enough to make.



White corpuscles separated from the red after the addition of acetic acid.

In addition to these cells, Dr. Jenner, in examining the case, noticed some cells with large central nucleolated nuclei, which did not bear nearly so much resemblance to ordinary white corpuscles, as the more numerous cells which I have just described to you. I also noticed, on one occasion, some very small, not very well defined white corpuscles, smaller than red particles.

These white corpuscles could be obtained in various ways; they were seen quite readily by placing at once a drop of blood under the microscope; also by beating the blood and separating the fibrine,—the heavy red particles subsided to the bottom of the vessel, while above them, and below a layer of perfectly clear serum, floated a thick white layer, composed entirely of white corpuscles; finally, by allowing the blood to coagulate in a small evaporating basin, in the course of a few minutes the surface of the clot became quite white, and, on examination, this was found to depend on the entanglement of a vast number of pale corpuscles in a most delicate web of fibrine. When the blood was drawn into a long narrow vessel, or allowed to coagulate in a flat-bleeding basin, it did not, however, exhibit this phenomenon, or show any disposition to buff or cup.

These corpuscles were carefully compared with the pale corpuscles, seen in drops of perfectly healthy blood, and, with the exception of their much greater numbers and larger size, I could myself discern no difference between them.

Such were the microscopic characters of the blood; the other physical characters were as follows: When drawn from a vein, the blood coagulated as rapidly as usual; it formed a clot which was firm, but rather voluminous; in some forms of vessels the pale corpuscles appeared at the surface of the clot a few minutes after coagulation. In other cases they did not. The serum was separated in good quantity, had a light greenish tint, and was perfectly transparent.

The venous blood was analysed on two occasions: first, on the 20th December, the blood being taken three hours after food. The fibrine was separated by beating, was washed, boiled in alcohol, and then dried and weighed; the red particles were estimated by subtracting the weight of the fibrine and the solids of the serum in 1000 of blood from the weight of the whole solids in 1000 of blood; the coagulable matters of serum (albumen) were obtained by coagulating the serum, washing with boiling alcohol and water, drying and weighing; the salts of the serum, by evaporating the washings, and burning off the organic matter; and the incoagulable organic matters of serum were estimated by deducting the

weight of the albumen and salts from the weight of the whole solids of the serum. I shall point out to you directly, that this method which, like all other methods, is defective, was especially so in the present analysis.

The composition of the blood in 1000 parts was then as follows:—

Fibrine (with probably adherent white corpuscles)	7·08
Red particles, with a number of white corpuscles which could not be separated	101·63
Coagulable organic matters of serum	63·03
Incoagulable	3·08
Soluble salts of the serum	8·63
Insoluble salts of the serum	·48
Water	816·07
	1000·00

The composition of the serum was as follows. The reaction was strongly alkaline:—

Coagulable organic matters	70·71
Incoagulable	3·46
Soluble salts	9·68
Insoluble (obtained by incinerating the dried albumen)	·55
Water	915·6
	1000·0

A small portion of serum was examined for uric acid in the ingenious method devised by Dr. Garrod, viz., by the addition of a little acetic acid to a portion of serum in a watch-glass, at the bottom of which lies a fine hair. No crystals of uric acid could, however, be perceived.

On the 15th of February the patient was bled again three hours after food; the fibrine was estimated by washing the clot. The composition was as follows:—

Fibrine (with probably adherent white corpuscles)	4·75
Red particles (with undetermined white corpuscles)	97·73
Organic solids of serum	69·27
Inorganic solids of serum	8·25
Water	819·8
	1000·00

In the first analysis the solids are in rather higher proportion (183·93 to 180·2), the fibrine rather in excess (7·08 to 4·75), the red particles in somewhat greater abundance (101·63 to 97·73), the salts are nearly the same, or in slight excess (9·11 to 8·25). But altogether, the agreement between the analyses is very considerable. The special fallacies of the analyses were these; although I did not microscopically examine the fibrine, it yet seemed likely that its apparent great abundance might have been in part owing to adherent white particles; also many of these particles were evidently mixed up with the red particles, as was proved by the thick white layer above the heavier red particles in the defibrinated blood, and I could devise no means of separating them. I could, indeed, have drawn off the white particles with a pipette from the red layer below, but then I could not free them from the serum, and therefore could not in any way estimate them. The proportions, therefore, of fibrine and of red particles, as given in the analyses, are untruely high, although it is difficult to say to what extent this is so. These inferences may, however, be safely drawn; viz., first, that the blood was poor in solids; secondly, that it was not deficient in fibrine; thirdly, that it was poor in red particles; fourthly, that it was very rich in white particles; fifthly, that the albumen was at nearly the natural standard, and the incoagulable matter of serum rather small in amount; sixthly, that the serum was rather more plentifully supplied than usual with soluble salts.

2. *The urine.*—The condition of the urine was carefully noted every day, and the following was the usual state:—It was generally copious; sixty, eighty, and even 100 ounces being often measured in the twenty-four hours; and, in addition, there was generally some passed in the closet. It was generally acid, rarely neutral, of pale amber colour, with deposits of pale lithates, and incidentally of phosphates, and now and then of oxalate of lime; it contained albumen, in very variable quantity, a small quantity of oil globules on two occasions, and once gave an indication of bile.

I had only time to make one chemical examination of it. From the 25th to the 26th of December the urine of twenty-four hours was most carefully collected; it measured 90 oz. It was nearly colourless, with a neutral re-action, and a deposit of pale lithates perfectly soluble by heat. The specific gravity (by bottle) was 1026·1 (temp. about 45° Fahr.). It gave no tint with nitric acid, but threw down albumen by heat and nitric acid. The urea was estimated as nitrate (48·93 per cent.) after the albumen was separated; the other ingredients in the usual way. The composition in 1000 parts was as follows:—

Urea	10·57
Uric acid	·75
Albumen	2·
Extractives	12·18
Soluble salts, of which about 4·56 was phosphate of soda	10·07
Phosphate of lime and magnesia	·59
Water	963·84
	1000·00

We also endeavoured to determine the diurnal changes of the urine, and I subjoin the record for the days on which the notes were made. The acidity was determined merely by test paper.

Jan. 2.—*Urine passed between* 10 *and* 11 *a.m.* (2½ *hours after breakfast.*)—Sp. gr, 1026; moderately acid; light lemon yellow colour; turbid from white lithates and phosphates; a little albumen.

Passed immediately before dinner, half-past 12.—Very acid; dusky lemon colour; turbid; a reddish tint, like bile, given by nitric acid; albumen 1-7th; deposit of lithates and a little uric acid.

Passed at 4 *p.m.* (4 hours after dinner.)—Moderately acid; sp. gr. 1021; light lemon colour; rather turbid; deposit of pale lithates and a little uric acid; albumen in much less quantity.

Passed at 8 *p.m.* (3 hours after tea.)—Sp. gr. 1022; lemon coloured; copious deposit of pale lithates, and a little uric acid; albumen in moderate quantity.

Jan. 4.—*Urine passed between* 7 *and* 8 *a.m.* (before breakfast.)—Acid; lemon-coloured; turbid; lithates; sp. gr. 1025; no albumen.

Passed at 11 *a.m.* (3 hours after breakfast.)—Straw-coloured; acid; slightly turbid; pale lithates; and a little uric acid; a considerable amount of albumen.

Passed at half-past 12 (just before dinner.)—Straw-coloured acid; slightly turbid; pale lithates; less albumen than the last.

Passed at 4 *p.m.* (4 hours after dinner.)—Acid; light straw-colour; pale lithates and a little uric acid; no albumen.

Passed at 8 *p.m.*—Acid; pale lithates and a little uric acid; no albumen.

These examinations did not disclose any very striking points. It is interesting in connexion with the lowered amount of red blood particles to observe that the urine was throughout deficient in colouring matter, as indicated by the continual appearance of *white* lithates; it was also too copious; the albumen varied in amount on different days and at different periods of the same day very considerably; it was never associated with casts of tubes or renal epithelium, and did not appear to imply true Bright's disease.

3. *The Perspiration.*—No observations were made about this excretion, except that it was generally strongly acid on the trunk and face. On two occasions it is noted as neutral on the face.

4. *The stools* were usually solid, and did not appear altered when inspected on two or three occasions. No special examination was made of them. As already mentioned, the patient said they once contained blood.

5. *The saliva* was not especially noted, but was not more abundant than usual; there was no *expectoration;* and there were no *discharges* from the stomach.

Such were the phenomena in this case. Before proceeding to make some remarks upon it, let me observe, that the condition of the spleen in cases similar to the one under consideration has not been very accurately determined. After death the organ is found large; very hard; dark coloured on the surface, with a mottled section, which seems frequently to be caused by fibrinous exudation, thrown out into the interstices of the organ. Sometimes, as noticed by Virchow, there are large fibrinous masses. We had, of course, no opportunity of observing these things.

There are various interesting points arising from the consideration of this case, to which I must now shortly allude.

1. That the simultaneous occurrence of an extraordinary number of colourless cells in the blood, and of a great enlargement of the spleen (not consequent on ague, and probably special in its nature), is something more than a mere coincidence, appears certain, from the number of times that it has been observed. Virchow has assembled the majority of cases hitherto recorded, and has added some himself; altogether he has collected eleven. We may add to these four other cases,(a) which are not included in his list, and with the present case, the number is raised to sixteen. Now, although the white corpuscles of the blood are liable to very great variation in number, and, although their changes are very imperfectly known, it yet would seem but fair to infer, that when two rather uncommon phenomena, (viz., the immense number of cells in the blood and idiopathic enlargement of the spleen,) occur together in sixteen cases, and either phenomenon separately has been only once noted, that there is some intimate connexion between them. Yet mere congestion and hypertrophy of the spleen will not cause increase of white corpuscles, as is proved by a case recorded by Vogel, (*Canst. und Eisenm. Jahresb.* 1849, p. 11.) (b)

2. It is probable, also, that of these two phenomena, the enlargement of the spleen is the anterior, and stands more or less closely in the relation of cause to the other condition. At least there is one argument for this view. Admitting that there is some causal relation, it might be supposed, *à priori*, that the spleen, by its change, might give rise to the development of the pale corpuscles, or that the pale corpuscles, formed in some unknown way, might occasion the enlargement of the spleen. But an interesting observation made by Virchow seems conclusive against this last supposition, for he has noticed (Archiv? 1849, p. 567), that in a case in which there was an extraordinary hypertrophy of the lymphatic glands, both internal and on the extremities and neck, the white corpuscles were in such numbers as to make the blood found in the right auricle after death, look quite purulent in appearance, and to be in relation to the red corpuscles in as high proportion as 2 to 3. In this case the spleen was not at all enlarged. Therefore it appears fair to infer, that if, in this case, the white corpuscles in such numbers could not cause any enlargement of the spleen, therefore in the cases in which the spleen was enlarged, it became so independently of the condition of the blood. It would seem, therefore, that admitting a connexion between the two phenomena, the enlargement of the spleen in one set of cases, and of the lymphatic glands in Virchow's case, will be proved hereafter to be anterior to the change in the blood.

3. As to the nature of these white corpuscles, the first question is as to the relation of these corpuscles to the ordinary pale corpuscles. I have already stated, that, as far as I could see, no differences beyond those of numbers and larger size could be stated between these cells and the ordinary corpuscles of the blood. Indeed, on examining some specimens of healthy blood, there appeared to be greater differences as to size and transparency between any two

(a) The references to the literature on this subject are *Froriep's N. Notiz.* 1845, p. 780; *Med. Vereinszeitung*, 1846, Nos. 34, 36; 1847, Nos. 3, 4; *Canstatt. und Eisenm. Jahresbericht*, 1846, p. 23; *Virchow's und Reinhardt's Archiv.*, 1848, p. 563; Ibid. 1849, p. 587; *Transactions of the London Pathological Society*, (cases by Dr. T. K. Chambers,) p. 109; Dr. Fuller's case, (*Med. Gaz.* 1846, p. 404,) is included in Virchow's list. In the *Monthly Journal of Medical Science*, (May, 1850,) Dr. Bennett alludes to a case under his care. A case occurred in University College Hospital in 1846, under Dr. Taylor, and was carefully recorded, but has not been published.

(b) Since this Lecture was delivered, Dr. Fuller exhibited to the Pathological Society of London a specimen of encephaloid disease of the abdomen taken from a patient in whose blood there were numerous white corpuscles. The inference in the text appears, however, still to hold good.

cases, than between either specimen and the corpuscles of the diseased blood.

The next question which suggests itself is, the degree of resemblance between these cells and pus cells. And if the above opinion be correct, this question is only another way of opening the much agitated subject of the distinctions between the physical characters of white blood corpuscles and pus-cells. Virchow and Vogel have already expressed an opinion, that the white corpuscles in healthy blood and in this splenic disease, cannot be distinguished from pus mixed with the blood. And certainly, if we take the characters which have been held to distinguish pus-cells from white corpuscles, we find them to fail altogether when we apply them to the case before us. For example, Lebert, in M. Sedillot's late work on "Pyohæmia," (a) has laid down the following distinctive marks between pus-cells and white corpuscles, and Sedillot himself has expressed himself even more strongly as to the possibility of drawing the distinction. (b) These marks are, that the pus-cells are larger, are of a more yellow colour, are perfectly spherical, have a rougher and more granulated surface, and have much larger and better-defined nuclei. But, however true these distinctions may be between well-marked pus-cells and some of the white corpuscles of healthy blood, they will not apply to many of the cells in our diseased blood; for we had cells of extraordinary size, very granular on the surface, and darkish in colour, though not yellow, with nuclei after the addition of strong acetic acid, better defined and larger in appearance than the nuclei of the pus cells. So, also, it could not be perceived, that these cells were flattened; they appeared as spherical in shape as pus cells are. And as to drawing any distinction between the grouping of the nuclei in these cells and in pus-cells, it can hardly be ventured upon in the face of the observations of H. Müller and Henle, who have indicated the remarkable differences which can be artificially produced in the nuclei of pus cells and lymph corpuscles by the addition of acetic acid of various degrees of strength (c).

But, although there were some corpuscles in this blood which could not, I think, be distinguished from pus cells by physical characters, yet, if all the pale corpuscles could have been separated from the red particles, and shown to any one, I do not think that they would have been mistaken for pus. There seemed to be perceptible differences in the very variable size, in the smoothness and comparative transparency of many of them, and in the white colour of the smaller ones, between them and pus. And of course, although the distinctions cannot be well drawn, it would be as wrong to call these cells pus cells, as to give that title to the ordinary white corpuscles of the blood.

No transition from these pale corpuscles into red corpuscles could, as far as I could see, be made out. The white corpuscles varied infinitely in size, yet there was no difficulty in referring every white or red particle to its proper class. We did not see, either, how these white particles retrograded, whether by fat metamorphose, or some kind of pigment transformation—changes which have been observed by Virchow and others.

4. The exact nature of this disease is still obscure. You will observe, from the few observations I have made, that the only conclusion we are entitled to draw from the facts before us, is, that there is some intimate connexion between these two affections of the spleen and blood; but, when it is remembered how little known are the changes which the healthy spleen produces upon healthy blood, how completely unexamined at present are the changes which spleens, diseased in various ways, produce on the blood, and how little examined the white corpuscles of the blood have been, it must be confessed that we are not entitled to go farther than this. The very fact, that every enlargement and congestion of the spleen is not attended with excess of pale corpuscles in the blood, should make us hesitate at present to do more than record the facts as a basis for some future inquiry. Virchow has spoken of the disease as a kind of interruption, or arrest of the development of the red blood cells, and our case so far supports this as proving that the red particles are notably diminished in amount. But this opinion of Virchow is of course simply a conjecture.

5. In comparing the phenomena of this case with those of the cases already reported, we find a considerable resemblance. A tendency to inflammations and hæmorrhages seems generally to exist, and our patient had frequently pains over the spleen and liver which appeared inflammatory; she had also hæmorrhages from the digestive mucous membrane, (certainly from the stomach, and, according to her own account, from the intestines,) and the profuse bleeding from the leech-bites pointed also to an hæmorrhagic tendency. There did not appear to be any disorder or perturbation in the system from this condition of blood. Digestion in the stomach was performed without apparent difficulty, and, although there was emaciation, it was not greater than might be accounted for by the age of the patient. As far as the urine was concerned, the proper quantity or even an excess of uric acid, urea, and indeterminate organic matters, appeared to pass out of the system. Although there was a dusky yellowness of the skin, there was no true jaundice. The pulmonary functions did not appear altered.

6. The *causes* of this peculiar disease are quite unknown. In almost all the cases the splenic enlargement has ensued without obvious cause. In one of Virchow's cases, the patient had had ague fifteen years previously; beyond this there appears no reason to suspect a malarious cause for the enlargement. Our patient was certain she had never had ague, and she had resided for sixteen years in London, where ague is very uncommon. While in the hospital she had some irregular shivering fits, followed, as such fits usually are, by heat and sweating, but there was no attack of true ague.

7. The treatment adopted in this case was not much varied. I was desirous of trying, in the first instance, the effect of the disulphate of quinine; at first half a drachm, and subsequently 45 grains were given every 24 hours for 42 successive days, without any apparent change in the size of the tumour or in the amount of colourless corpuscles. All this time, also, iodine ointment was rubbed over the spleen. She took also six grains of iodide of potassium with nine grains of disulphate of quinine, for 27 days without effect. Finally, seven days before she left the hospital, we began to give iodide of potassium, with the intention of pushing the dose. She took 3ss in the 24 hours during these few days, without effect, and continued also the iodine externally. Occasionally the spleen either varied in size, or the intestines encroached upon it, and caused an apparent difference; but, on subsequent examinations, the abdominal tumour used to be found as large as ever, and the blood examined about four days before the patient went out, contained as many pale corpuscles as usual. I intended to have tried various other remedies, iron, mercury, &c., had the patient not quitted the hospital.

8. One word with regard to the name of this disease. After death it would appear that the separation between the red and white corpuscles gives a whitish or yellowish white colour to the blood in the heart and large vessels. Hence Virchow has termed the disease "*Leukæmia*," *white blood*, a term which has also been used to designate that condition of the blood in which, from various causes, the serum is milky. The propriety of calling this splenic disease "Leukæmia," may be questioned. The blood in our case was not in the least white; the serum was perfectly transparent; and, although occasionally the white particles would collect on the top of the recent coagulum, and give a pseudo-buffed appearance to the clot, this did not occur on all occasions, and usually the pale corpuscles were uniformly intermixed with the red in the clot, and there was not the least trace of *whiteness* about any portion of the blood. The phrase "white blood" having been appropriated to the milky-looking serum, it is, perhaps, desirable to leave the disease we have now considered, for the present unnamed.

I append a second figure, as above, exhibiting a few red and white corpuscles, the former in *rouleaux*, to show the relative size.

(a) De l'Infection Purulente ou Pyoémia. Par le octeur C. Sedillot. Paris: 1849. Page 267.

(b) Ibid., p. 404—5.

(c) I am aware that Reinhardt and others have disputed the supposed splitting of the nucleus under re-agents, but the positive observations of Henle seem unanswerable.

ORIGINAL CONTRIBUTIONS.

TYPHUS FEVER, TYPHOID FEVER, RELAPSING FEVER, AND FEBRICULA,

THE DISEASES COMMONLY CONFOUNDED UNDER THE TERM

CONTINUED FEVER.

ILLUSTRATED BY CASES COLLECTED AT THE BED-SIDE.

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(Continued from page 236.)

In my last paper were detailed some cases of typhoid fever, which I stated might be regarded as illustrative of that disease.

In the present paper my intention is to give a general description of the symptoms and lesions of typhoid fever; and in so doing I shall endeavour, as I did when describing typhus fever generally, to avoid all unnecessary detail,—giving a mere sketch, not a finished portrait of the disease. The minute details shall be filled in when narrating the cases selected to illustrate particular circumstances, symptoms, or lesions.

GENERAL DESCRIPTION OF THE SYMPTOMS AND PATHOLOGICAL APPEARANCES OBSERVED IN TYPHOID FEVER.

Symptoms.—Typhoid fever rarely affects persons more than fifty years of age. I have seen but one exception to this rule, and that was in a female, aged fifty-five years. It is common in young children, being one of the many different diseases confounded together and described as "infantile remittent fever." In a large majority of cases, however, typhoid fever occurs in persons between fifteen and thirty years of age, and it is not very common in persons more than forty years of age.

It affects both sexes, and, so far as is known, in about equal proportion.

The duration of the diseases is from 21 to 28 or 30 days.

Typhoid fever usually commences more or less gradually, so that the patient is often unable to fix the date of its outset. All he can say is, that his illness began about such a day.

The first symptoms are loss of appetite, pains in the limbs, frontal headache, chilliness, and frequently abdominal pains, or diarrhœa. The patient continues to keep about, although feeling very weak. Lies down, perhaps, a part of the day. After a few days, four, five, or six, he takes entirely to his bed, the diarrhœa increases, or, if not previously present, commences, the increase in the severity of the diarrhœa being frequently referred to the use of a purgative. (a) The countenance is indicative of anxiety and want of strength, or, perhaps, of apathy; the mind is clear; the conjunctivæ pale, slightly injected; the pupils normal; the cheeks, perhaps, somewhat flushed, sometimes one, sometimes both, being so affected. There is frequently loss of sleep from the first, or the sleep is disturbed; the patient now and

(a) "Take a pill and draught," says the druggist to the sufferer from typhoid fever, who crawls to his counter to receive gratuitous advice and buy physic; "that *can* do you *no* harm." Hæmorrhage and perforation, with their attendants, suffering and death, prove the TRUTH(?) of the aphorism.

them fancying that he has not slept a wink, when he has been dozing hours. (a) Vertigo, especially in the erect position, singing in the ears, an unpleasant, undefinable taste, are pretty constant symptoms at the outset, and epistaxis, varying in amount from a few drops to many ounces, is very often one of the earliest symptoms. The latter is sometimes repeated more than once during the first week; occasionally there is dimness, or even loss of vision. The belly is usually somewhat distended, its shape being peculiar, viz., rounded from side to side rather than "pot"-shaped, *i. e.*, enlarged from above downwards, as in mesenteric disease. It is resonant on percussion. Gurgling, on firm pressure, may commonly be detected in the right iliac fossa, and there is often tenderness in the same situation. The urine is usually at this period rather scanty, and somewhat high-coloured. The skin is hot and dry, though occasionally perspiration follows the heat of skin which succeeds to the rigors or chilliness. Such are the symptoms present during the first week or ten days of the majority of cases of typhoid fever.

From the eighth to the twelfth day a new and characteristic symptom appears, viz., an eruption on the skin. The spots constituting the eruption are scattered irregularly at various and often considerable distances from each other; few in number; confined, in a majority of cases, to the anterior and posterior surface of the trunk; now and then, however, existing on the extremities. Each spot is of a delicate rose-colour; circular; the hue gradually passing into that of the surrounding cuticle without any well-defined margin or outline; when the finger is passed over them gently they are found to be very slightly elevated; if firmly pressed by the finger they disappear entirely, but resume their colour and elevation when the pressure is withdrawn. Each spot varies in diameter, from half a line to a line and a half. The number of spots ranges from two or three to several hundreds; from six to fifty may be considered the most usual. Each spot continues visible about three days, fresh spots continuing to appear every day or two till the termination of the disease. In some cases, however, there is no eruption present. The headache continues till about from the 6th to the 12th day confined to the forehead, and without any definite character. At the time that the headache ceases delirium commences, at first only observed at night, but subsequently more or less constant. The character of the delirium varies, being, however, in a majority of cases, somewhat active. The patient is noisy, or he leaves his bed to roam about.

The *tinnitus aurium* commonly disappears about the end of the first week. The delirium continues till the death or recovery of the patient, interrupted, however, as the disease advances, by somnolence. The latter symptom ordinarily commences about from the 12th to the 21st day, and terminates only with the general affection. At first the patient is said by the nurse to sleep a good deal; then he not only sleeps much, but heavily; and, finally, it may be, he is aroused with some difficulty.

As the diseases progress the strength of the patient diminishes, so that by the commencement of the third week he is often unable to walk alone, and, by the 21st day, even to reach the close-stool without some assistance. He lies now pretty constantly on his back, with his arms across his chest or abdomen. The cheeks are usually flushed by this time, if not before. The flush is pink and circumscribed, sometimes one, sometimes both cheeks being affected at the same moment. The flush appears and disappears frequently, many times in the day; as a rule, perhaps, it is more marked towards evening. Sudamina beneath the clavicles, in the groins, at the epigastrium, or even covering the whole surface, are frequently present.

The tongue, which at the outset was white, soon grows red at the tip and edges, then becomes dry in the centre; finally quite dry; at the same time it appears contracted, small, its edge and tip often continue red, while its dorsum is covered with a smooth, pale, yellowish brown fur. This fur is fissured, split across longitudinally, and transversely; the tissue seen between the fissures being deep red; ultimately the fur may become dark brown, and at the same time sordes may form on the teeth. In rare cases the patient, as the disease advances, is unable even to protrude the organ. Difficulty of swallowing, fluids being rejected by the mouth or nose, (a) is an occasional symptom during the third or fourth week. The abdomen becomes more distended; the diarrhœa increases; the stools, often amounting to 5, 6, or even 8 or 10 in the day; they are liquid, pale, brownish yellow, with flocculi of an opaque whitish yellow floating through them, like coarse bran. As the patient loses his strength they are passed involuntarily. Pain in the abdomen, unless perforation occurs before extreme somnolence or coma has set in, is rarely complained of. Hæmorrhage from the bowel is an occasional symptom during the third or fourth week. The urine is usually tolerably abundant.

The pulse, frequent from the outset, often attains the rate of 120 during the second and third weeks; at the same time, the frequency is found to vary much from day to day, without any appreciable alteration in the general or local symptoms coincident; thus, to-day 96, to-morrow it may be 110, and the next again 96, to be on the succeeding day or two 120, and again to fall to 100, without, as I say, any alteration in the condition of the patient for the better when it falls, or for the worse when it rises. There is some cough and a good deal of sonorous râle present from the commencement to the termination of the disease. Mucous râle is sometimes observed in the later stages. These signs now and then lead to the disease being mistaken for some chest affection, and it is only as it progresses that it is said to "pass into typhus." (b) Death, in a majority of cases, occurs toward the end of the third week; frequently during the fourth; more rarely before the termination of the second. Sloughs often form at the lower part of the sacrum during the third or fourth week; now and then they occur over the hips, when the patient has laid long on his side; and in exceptional cases they are found on the heels, the inner aspects of the knees, the ankles, and every part exposed to pressure.

Death may be the result of the general disease, or it may ensue from some local complication. Of these, ulceration of the intestinal mucous membrane, leading to hæmorrhage, or to perforation of the peritoneal covering of the gut is the most common. When the result of the general disease, the fatal termination always occurs before the 30th day. Local lesion of sufficient moment to account for death is always found after that date, proving the natural duration of the general disease to be about four weeks, that is, from 28 to 30 days. When recovery ensues, the change from disease to health is very gradual. The improvement begins about the end of the fourth week. The tongue grows moist, the skin soft, the pulse falls in frequency, somnolence disappears, and the appetite returns. The diarrhœa ceases. A remarkable fatuity remains, in some cases, long after recovery: and in the majority of cases I think there is some diminution of intellectual power for some little while after convalescence is established. I have seen many cases in which a childishness of mind remained for more than a month after, in other respects, restoration to health.

Although the foregoing is a description of the ordinary form of severe typhoid fever, yet there are certain deviations from that form which require notice. Firstly, because cases of this description very frequently occur, and I think are little understood; and, secondly, because they occasionally prove fatal before any idea of their serious nature has crossed the mind of the practitioner. The patient, unable to fix on any particular day as that on which his illness commenced, feels ill, weak, languid, chilly, loses his appetite, and suffers from slight frontal headache. He feels "done up," "ennuyé," listless, unapt for the cares of life, sits about, perhaps lies down on his bed for a part of the day, and then, feeling a little better, tries voluntarily, or by the persuasion of his friends, to exert himself; he leaves the house to walk for a while; is soon, however, too tired to continue exertion, returns and again lies down on his bed; night comes, and generally with it an increase in those symptoms denominated febrile; the pulse, which was rather high during the day, rises to 100 or 112, or even more; the skin is hot; occasionally, however, the patient sweats a little, but experiences no permanent relief. He is restless and uneasy.

Some days, perhaps, he thinks he feels better, and the medical man hopes all will soon be well; he can discover no local lesion: at most a little cough, with occasional sonorous râle, leads to the opinion that the patient has catarrh; or it may be that slight diarrhœa, some griping pain in the abdomen, and a little tenderness in the same region, favour the idea that he is suffering from trifling gastro-intestinal irritation. The invalid himself declares that it is "all weakness," that "what he wants is strength," and his friends fully believe *him*. They can but note his tremulous movements; they hear him loudly complain of weakness, they see him emaciate daily, for loss of flesh is generally a prominent symptom. Stimulants and strong meats are administered, the medical attendant fancies that he sees in this injudicious diet, persisted in openly or covertly, by the friends, in spite of his protestations, the cause of all the trouble, and so the case hangs on hand from day to day, from week to week, the relatives anxious and dissatisfied, the physician at fault, and *consequently* worried. Such a case may terminate in two ways: slowly, after the expiration of about a month or five weeks from the outset, the abdominal symptoms, perhaps all along very trivial, disappear; the patient gradually, but daily, regains his flesh and strength, and all goes well. (a) But in other cases the event is far different; the patient while at the close stool faints, the utensil is found half filled with blood, hæmorrhage returns, and ultimately he sinks. Or he is suddenly seized with intense pain in the abdomen and vomiting, and the surface is cold, the features sunk, the whole expression anxious and depressed. Distension and extreme hardness of the belly soon follow, and death quickly closes the scene.

An examination of the subject reveals in such cases ulceration, generally *very extensive*, of the agminated glands at the lower part of the ileum, and enlargement of the mesenteric glands. In the last supposed case, the floor of one ulcer has given way and peritonitis supervened. Cases to illustrate these important varieties, I shall detail in the two subsequent papers.

Cadaveric appearances. — Subjects dead from typhoid fever are usually much emaciated. The cadaveric rigidity continues marked in all the limbs for more than twenty-four hours after death. The cadaveric congestion of the posterior surface of the trunk and extremities is not particularly deep and extends but little up the sides of the trunk. Signs of decomposition do not, as a rule, appear very rapidly. Miliary vesicles, if noted just before death, are still seen. *There is no trace of the spots noted during life.*

The quantity of serosity in the cavity of the arachnoid, beneath that membrane, and in the lateral ventricles, differs but little from that found in health. The colour and consistence of the brain are usually natural. The mucous membrane of the bronchial tubes is very frequently vividly injected and filled with frothy mucus. The congestion of the most depend-

(a) The coma vigil of Chomel.

(a) Chomel says, this symptom may arise from feebleness of the muscle of deglutition. He does not give any case to prove the assertion. In every case of the kind which I have examined after death, there has been some local, pharyngeal, œsophageal, or epiglottidean, physical lesion to account for the symptoms.

(b) This is an absurd expression. One specific disease is never converted into another specific disease. A local inflammation is never converted into a specific disease. Pneumonia can never pass into typhus fever, any more than it can pass into scarlet fever; the one fever, like the other, having its distinct cause, its definite course, and its peculiar symptoms.

(a) Every man who has seen much private practice must have witnessed this kind of case times and often, and I may add, if not perfectly familiar with the varying phases of the diseases I am describing, have been baffled, foiled, worried. Perhaps, too, after two or three weeks' attendance, have had the annoyance of losing his patient's confidence and of seeing another called in to reap the credit of a cure, because, at the expiration of about four weeks, the disease terminates naturally.

ing part of the lung is not extreme. Lobular consolidation of the pulmonary tissue is present in a large majority of cases.

This lobular consolidation occurs in two distinct forms, non-granular and granular. (a)

Occasionally there is, in addition to lobular, extensive lobar-pneumonic solidification. In about one-third of the cases, signs of recent pleuritis are observed. The pericardium appears healthy. The heart, in about one-third of the cases, is softer and more flabby than it is usually found after death from other diseases. The earlier death occurs in the disease, the more likely is the heart to be soft and flabby. The lining membrane is rarely much discoloured from imbibition, unless a considerable time has elapsed between the fatal termination and the examination of the body. The blood is fluid in a few cases, but in the majority tolerably firmly coagulated in the auricles and ventricles.

The spleen is considerably enlarged and softened. The liver is occasionally flabby. Signs of peritonitis, that disease being the consequence of the lesion presently to be described (perforation), are not infrequent. The kidneys are generally healthy. The above structural changes are only occasionally found after death.

Enlargement of the lymphatic glands and ulceration of the mucous membranes are constant phenomena.

Of the latter, ulceration of the pharyngeal mucous membrane occurs in about one-fifth of the cases. Ulceration of the larynx occurs occasionally, but less frequently than ulceration of the pharynx. The œsophagus is similarly affected in about the same proportion of the cases as the larynx. Occasionally, yet rarely, ulcers are found in the mucous membrane of the stomach, still more rarely in the duodenum.

The Diagnostic Lesion is found in the ileum. Enlargement of Peyer's patches followed by ulceration. The patches next the ileo-cœcal valve are the largest and the most extensively ulcerated—the thickening and the ulceration of these bodies diminishing as they recede from that situation.

Two varieties in the affection of these glands are observed. In the *first*, the mucous and submucous tissue is thickened, so that the whole patch stands considerably above the level of the adjacent membrane. The mucous membrane of the patches farthest removed from the ileo-cœcal valve is rugose, as it were pitted all over. On the whole, perhaps, to say they offer a miniature representation of that condition of the mucous membrane of the stomach which has been termed mammillation, conveys the best idea of their aspect. At the same time that it is thickened, the mucous membrane of the patch is softened and redder than natural. The submucous cellular tissue, also, presents a pinkish hue. The ulceration in the patch is the more marked, as the latter is situated nearer to the cœcum. At a variable distance above that viscus the agminated glands are found ulcerated, the ulcers increasing in depth and extent as they approach the termination of the small intestine. In the *second* form the thickening of the patch appears due chiefly to a deposit of yellowish white substance in the submucous cellular tissue, splitting that, as it were, into two layers. The patches sometimes stand as much as a third of an inch above the surrounding mucous membrane. Ulceration follows also this form of thickening. The solitary glands at the lower part of the ileum are frequently enlarged and ulcerated.

Ulceration of the mucous membrane of the large intestine, generally of the cœcum and colon adjacent, is present in about one-third of the cases. The mucous membrane of the gall-bladder, the urinary-bladder, and the vagina are occasionally, but rarely, the seat of ulceration.

Of the lymphatic glands, those constantly affected are the mesenteric. And of the mesenteric glands themselves the most extensively diseased are those seated next the termination of the ileum.

The mesenteric glands are invariably enlarged, reddened, and softened. Sometimes they are the seat of a deposit of a yellowish white friable matter, and occasionally of a collection of purulent-looking fluid. The size these glands may attain varies from a bean to a pigeon's-egg.

The mesocolic glands are sometimes large, red, and soft. Occasionally the bronchial glands, the lumbar glands, the glands in the vicinity of the cystic duct, of the œsophagus, of the small curvature of the stomach, and in the cervical region are enlarged and redder than natural.

The modifications produced in the lesions by the duration of the disease, as well as more particular descriptions of the lesions themselves, will be given with the cases to be detailed in subsequent papers.

(a) For a particular description of these two forms, as seen in the lungs of subjects dead from typhoid and typhus fevers, I must refer the reader to my papers on those diseases in the *Monthly Journal of Medical Science*.

ON THE RESPECTIVE VALUE OF LIME-JUICE, CITRIC ACID, AND NITRATE OF POTASH, IN THE TREATMENT OF SCURVY.

By ALEXANDER BRYSON, M.D., R.N.

(Continued from page 212.)

The necessity of continuing the use of lemon-juice as an anti-scorbutic, in convict ships proceeding to New South Wales, was, it is to be presumed, clearly enough proved in the preceding part of this paper. It is now proposed to show, from observations recently made on the east coast of South America; how far we may be justified in preferring wine to spirits, in the event of both being procurable, as an auxiliary in preventing the evolution of scorbutic diseases amongst a body of men deprived of a fair proportion of vegetable aliment, and to make a few remarks respecting the supposed influence of endemic or local causes in the production of the disease.

For several years previous to 1845, Monte Video, although in a state of partial siege, was most abundantly supplied with all the staple articles of food, which were freely permitted to pass through the lines of the besieging army until about the middle of August of that year, when, in consequence of some interference on the part of the foreign squadrons in the river Plate, all communication with the country was summarily interdicted, and the city suddenly reduced to a state of absolute famine. So great was the scarcity of provisions at one time, that the inhabitants were obliged to make use of articles altogether unfit for human food, such as the carrion flesh of worn-out horses, and that of dogs and cats. With respect to fruit and vegetables they were even worse off, for, with the exception of a few herbs which were raised on some patches of ground between the advanced pickets and the walls, there was absolutely nothing of the kind to be procured in the city; and the herbs thus obtained were sold at a price which placed them far beyond the reach of any of the poorer classes of society.

In the British, French, and American squadrons engaged or interfering one way or another in the war between the Monte Video and Buenos Ayres Governments, although there was no absolute want of provisions of the kind usually carried to sea, still, as they had been dependent on Monte Video for fresh meat, fruit, and vegetables, the crews were reduced to nearly the same condition as the troops in the garrison, with respect to these articles, while in several of the vessels anchored six or seven miles from the land, in the estuary of the Plate, the health of the men began to suffer from long confinement on board, and the tiresome, monotonous nature of the service; in others, similar results took place from harassing boat duties, connected with the blockade of Buenos Ayres.

There are no means of ascertaining when the disease began to attack the people of the garrison; it was, however, within three or four weeks from the time the supplies from the interior were interrupted. In the squadron it was first observed in a vessel which had been constantly employed for several months blockading Buenos Ayres. During the whole of that time, amounting to a hundred and fifty days, the crew (with the exception of thirty-five days' supply of bad beef) were victualled on sea rations, and had, unless perhaps on the days when fresh meat was issued, the usual allowance of one ounce of lime juice and sugar per diem. Their general health did not appear to suffer much, until about the beginning of December, when they began to be attacked by dysenteric complaints, and at last, on the 20th of that month, one case presenting scorbutic symptoms having been detected, a general inspection of the whole crew took place, when fourteen men were found to be similarly affected. As the vessel did not remove from her station, and as no material change of diet could be obtained for the men, the number of cases increased rapidly, until, about the end of January, they amounted to upwards of sixty, besides others complicated with dysenteric symptoms.

The scorbutic diathesis appears to have been established sooner in the garrison than in the naval force, probably from the men in the shipping having been supplied with a daily ration of lemon juice; for, although they were perhaps better fed than many of the people in the city, there was a greater degree of sameness in their diet, while their confinement on board, the want of exhilarating exercise, and the unavoidably defective ventilation of the places where they slept, were all conducive to the evolution of scurvy.

Subsequently, in the early part of the following year, the disease began to manifest itself amongst the crews of several other vessels of the British and American squadrons employed in the same service, and consequently subjected to similar privations. In the former, every means short of abandoning the blockade, likely to arrest the progress of the disease, were immediately adopted; the men were prohibited from making savoury but insalutary messes with the fat of their salt meat, while the latter was macerated for a greater length of time before it was issued for cooking. Occasionally chance threw coasting vessels in their way, from which small supplies of fruit and vegetables were obtained, and an increased daily allowance of lime juice and sugar was afforded them.

These measures, but more especially the increased issue of lemon juice, had generally the effect of checking the progress of the disease for a time; but as in almost every instance their salutary action did not extend beyond ten days or a fortnight, it soon became evident that to maintain the efficiency of the respective vessels, it would be necessary to resort to other measures which promised more permanent results.

In the meantime, it had been ascertained that the French squadron associated in the blockade, although no better supplied with fresh meat and vegetables, was still free from the disease; or, if it had appeared, it was in so mild a form as entirely to escape general observation. This naturally led to further inquiry, and to a comparison of the various articles of diet in daily use in the British and French squadrons, by which it appeared, that the principal differences were as follow. In the British the men were supplied with biscuit baked in the city of Monte Video. In the French they were supplied with what, in nautical phrase is termed "soft bread," baked according to their usual practice on board their own vessels. In the former they had a daily ration of rum (one gill), in the latter a daily ration of red wine. The difference in the two kinds of bread, and in the other articles of diet being immaterial, the men in both squadrons having suffered alike from the want of fresh meat and vegetables, it was clearly evident, that the exemption of the French force from the scorbutic taint could only be attributed to the influence of the red wine.

Notwithstanding the apparently obvious cause of the disease, namely, the want of vegetables and fruit, there existed amongst all classes, both on shore and in the squadrons, a great contrariety of opinion on the subject; some attributing it entirely to the want of vegetable diet, while others, although admitting a certain degree of influence to the want of vegetables, assigned its outbreak to some atmospheric or epidemic cause peculiar to the region, and extending southward along the coast to Cape Horn.

The arguments adduced by the latter were, first, that although the hospitals were crowded with sick, and the garrison suffering from all the causes usually productive of typhus fever, yet that disease had entirely disappeared when scurvy became prevalent. The latter became, as it was termed, "the disease of the siege." Secondly, that the crews of vessels

of war elsewhere employed, had frequently been deprived of vegetable diet for a much longer period without presenting any scorbutic taint. Thirdly, that the rapidity with which the scurvy had been developed in Monte Video before the rigours of the siege could have made much impression on the health of the people, showed that it was at least partly dependent on some other cause than the want of vegetables and fresh animal food; besides, in previous years, it had prevailed when fresh beef, fruit, and vegetables were cheap and in abundance. Fourthly, assuming it as an established fact, that the remote essential cause existed in the atmosphere, and that the scarcity of vegetables, together with the scarcity and bad quality of other provisions, were but secondary causes favouring the evolution of the disease, the circumstance of its attacking foreigners proved that it did not depend on national idiosyncracy, but on an epidemic influence.

On the other hand, those who attributed the disease entirely to the want of suitable diet, maintained, that the crews of vessels previously employed in the river Plate, had not, unless under similar circumstances, suffered from scurvy. Secondly, scurvy, during the present war and siege, did not make its appearance in either the shipping or town, until after the scarcity of fresh animal food and vegetables had materially affected the general health of both communities. Thirdly, none of the better classes, who had the means of occasionally procuring small quantities of fruit and vegetables, together with fermented liquors, were attacked; the naval officers, for example, who belonged to well-organised messes, and consequently enjoyed a more varied and a better diet, entirely escaped, while the men belonging to the same vessels who were restricted to the public rations, were taken ill. Fourthly, that although vessels were occasionally arriving in the river from the Patagonian coast, with the disease on board, their crews had also, for several months successively, been without any fresh meat or vegetables, while they were greatly exposed and employed in the laborious occupation of collecting guano from the sterile rocks along the coast.

There is yet another circumstance which tells strongly against the epidemic theory, while it shows on what apparently trifling causes an invasion of this disease may depend. During the siege, besides the battalion of Royal Marines there were two British regiments of the line for some time quartered in the town. To the soldiers, when it could be procured, a daily ration of rum was issued, or, in lieu of rum, a small sum of money, which was generally spent in the purchase of some even more pernicious liquor. On the other hand, to the marines a daily ration of red wine was issued, and no spirit. Amongst the soldiers many cases of scurvy occurred, while the marines entirely escaped. A more forcible argument than this in favour of the total abolition of the daily use of spirits in the navy, in the army, and in merchant vessels, could hardly be adduced.

Although little can be brought forward in support of the epidemic theory of scurvy, either at Monte Video or elsewhere, still it would be extremely difficult to disprove, that it is not in some way or other connected with local causes. For example, in the Rivers Plate and Parana, while it appeared in some vessels there were others that entirely escaped, although the diet and duties of the men were in every respect the same; and similar results have been repeatedly noticed in other parts of the world. In convict-ships, when the prisoners, according to the old plan, slept in *bunks* or divisions arranged along the sides of the prison, it was by no means unusual for the whole of the men who slept in the same, or in contiguous *bunks*, to become affected, while others at a distance escaped. There are no means of explaining why this should have happened, or why certain ships of a squadron should be attacked, while others escape, unless we do admit the influence of that local cause; neither, if we admit the influence of a local cause, is there any means of accounting for its presence in one ship, or in one part of a ship, and not in another, otherwise than by supposing it to be of a personal nature, emanating from the bodies of the affected; and it will be indeed difficult for those who have once perceived the intolerably offensive effluvium arising from a scorbutic patient in an advanced stage of the disease, to conceive that it has not a most injurious effect on those who are compelled to inhale it, or that it may not prove instrumental in establishing in other individuals the same kind of morbid degeneration of which it is itself a product.

With regard to the symptoms, it is only necessary here to observe, that those which occur early are of most importance to be recognised in vessels of war, —or, indeed, in any other class of vessels, at a great distance from the land, because, whether the fetid effluvium arising from a number of men labouring under scurvy has or has not an influence in hastening the evolution of the disease in others who are predisposed to it, the sooner measures calculated to remove it or to retard its progress are adopted, the more likely are they to be attended with the desired result, and the vessel to be maintained in an efficient state. The more deceptive premonitory symptoms which chiefly require to be noticed are, debility and lassitude, without any obvious cause; erratic pains, or pains simulating rheumatism; together with diarrhœa and dysenteric affections. These have frequently existed for weeks, without exciting the slightest suspicion, until the swollen, spongy condition of the gums attracted the attention either of the patient or of the medical attendant. There is, however, another symptom of this class which does not appear to be very generally known, namely, night-blindness, which has frequently been mistaken for a distinct disease, depending on causes of an opposite character, and requiring a mode of treatment totally the reverse of scurvy. In a small vessel, for example, employed cruising off the river Gallenas, on the coast of Africa, where it was not possible to procure any fresh animal food, fruit, or vegetables, the men about the fifth month of the cruize began to exhibit in an increased degree the common tallow-like complexion, peculiar to Europeans in those regions when in ill health, and, shortly afterwards several of them became affected with night blindness. As the moon was nearly full at the time, and shone brilliantly at night, the affection was ascribed by the men to the influence of her rays, and called moon-blindness. Instead, however, of the number of cases diminishing as the moon waned, they rapidly increased. Out of a crew of about fifty men, there were at one time, besides others less severely affected, twenty utterly disqualified for night duty from this cause alone. Several small sores also degenerated into ill-conditioned ulcers, presenting livid granulations, with a glairy discharge. At length, a patient suffering from one of these ulcers, as well as from night blindness, accidentally mentioned, that he could hardly eat his allowance of biscuit, in consequence of pain in his gums, which, on examination, were found to be swollen, livid, and tender to the touch. The whole of the patients affected with hemeralopia were then examined; and in all, the gums presented a similar scorbutic appearance. The gums of a large brown monkey, which had also been suffering from night-blindness, were found to be in precisely the same condition. The true character of all these complaints being no longer questionable, the vessel proceeded to Princes' Island, where the men obtained fresh meat, with an abundant supply of fruit and vegetables. In the course of a week all the scorbutic patients were rapidly improving, while every trace of night-blindness had entirely vanished.

The same symptom was observed in one of the convict ships previously alluded to, and in her it disappeared also in the course of a few days after the prisoners had been supplied with fresh meat and vegetables at the Cape of Good Hope. These cases have been particularised, as more especially showing the rapid effects of diet in curing hemeralopia. Many others might be adduced to show, that it is by no means an unusual symptom of scurvy; and that when two, three, or four cases occur at the same time, there is no more certain sign of the general failure of the health of a ship's company.

As there were different opinions existing as to the true essential cause of scurvy along the coast of Brazil, so were there different opinions as to the best methods of treating the disease. The majority of the British and American medical officers, from a conviction that the disease was essentially one of debility, with depravity of the vital fluid, arising solely from a diet defective in fresh animal food and vegetables, trusted entirely to a more liberal supply of these, together with acid wines, fermented liquors, fruit and lemonade, administered *ad libitum*. Under this mode of treatment the disease was completely removed from the whole of the vessels forming the squadron in the river Plate. In one or two instances, however, it was found necessary to proceed to other parts of the coast, where the country was not disturbed by war, and where a more abundant supply of fresh meat, fruit, vegetables, and fish could be obtained, while the men had frequent opportunities of landing and enjoying themselves on shore. The Brazilian practitioners also admitted the disease to be one of debility, but they affirmed that there were dangerous internal engorgements indicated by difficulty of breathing, hæmorrhages, diarrhœa, ecchymoses, and sometimes by the so-called buffy state of the blood, which required depletion. Accordingly, every now and then they bled their patients to the extent of a few ounces, and otherwise treated them on antiphlogistic principles, giving them a small tuft of fresh vegetables which, for convenience, was generally suspended over their bed, to nibble or chew when they felt inclined.

The results of this system, as may be supposed, were most deplorable. The patients generally lingered long under treatment, and frequently died of dropsy, or diarrhœa, or from sheer exhaustion. These views, with respect to the treatment of scurvy, are not, however, peculiar to the native doctors of La Plata,—they have even been adopted and practised by physicians educated on this side of the Atlantic; and, if we are to believe their statements, with benefit to their patients. Still, to any one who has witnessed the rapidity with which scorbutic patients begin to recover the instant they obtain a suitable diet, and without the aid of any medical treatment whatever, it is, considering the causes on which the disease depends, extremely difficult to conceive by what mode of reasoning, or from what data these views and practices can be deduced or defended. It is with scurvy as it is, perhaps, with many other diseases; a removal or discontinuance of the cause, and a return to that mode of life which may be called normal, is generally all that is required to effect a cure.

The following are the conclusions that seem to be fairly deducible from the preceding observations: First, that although lemon juice and sugar, that is, lemonade, will not prevent scurvy for an indefinite length of time, and in despite of all kinds of privation with respect to vegetable substances, yet it will generally, in vessels provisioned according to the present system, retard its evolution, according to the presence or absence of other predisposing causes, for three, four, or perhaps for six months, and when given in increased doses after the disease has broken out, it will for a time lessen the severity of the symptoms, and sometimes effect a cure. Secondly, that spirits are totally devoid of anti-scorbutic properties, and injurious to the health of men deprived of vegetable diet. Red wine, on the contrary, is, under similar circumstances, conducive to health, and assists materially in warding off the scorbutic diathesis. Thirdly, as the best means of preventing scurvy from breaking out in large masses of men, is a wholesome, nutritious diet, consisting of fresh meat, vegetables, and farinaceous substances, so, when the disease has occurred, these are the best and perhaps the only remedies required to effect a cure.

REPORT OF CHOLERA AT SEA, IN THE FIFTY-NINTH REGIMENT, ON BOARD HER MAJESTY'S SHIP APOLLO.

By THOMAS FRASER, M.D.
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(Abridged by Dr. KIDD.)

[The following very valuable paper, supplying, as it does, a link in the chain of evidence as to the existence of cholera at sea, irrespective of local land influences, we owe to the kindness of Dr. Andrew Smith, and the anxiety evinced by the Director-General of the Army Medical Department, Sir James Macgregor, that any light our army experiences may

throw on a subject of such paramount importance as cholera, may be made available for the public good.

—Ed. *Medical Times.*]

On the 12th of June, 1849, the head-quarters of the 59th Regiment, some 512 men, embarked on board H.M.S. Apollo, at Cove, in Ireland, for Hong-Kong, China, in care of Dr. Fraser. Though cholera prevailed in Ireland at the time, the men were all remarked for their general health and high state of efficiency. After some few days at sea, a few cases of diarrhœa made their appearance. On the morning of the 18th, however, a man was reported to have "fallen down in a faint;" and, on Dr. Fraser being called, he found it a case of true Asiatic cholera, such as he had seen in India. The fluids ejected were those of cholera; true collapse set in; and, notwithstanding every available means, the man died in about 17 hours. It was ascertained afterwards, that he had been purging for two or three days previously, and had that morning taken a shower-bath, immediately after which he fell down insensible.

From the 18th till the 27th, diarrhœa became more common, but was ascribed to change of diet. On the morning of the latter day, another very marked case of cholera occurred; and a third, a woman of the regiment, on the 29th. The former recovered. From this time, all through July, up to the 11th of August, on nearing the coast of South America, a series of cases occurred regularly. [We regret our space compels us to give but an abstract of this part of the report.] One occurred the day after leaving Teneriffe; six cases during the ensuing week, of rather a milder type; and now, far out at sea, a week without any cases occurred. "I began to hope," says Dr. Fraser, "we were done with cholera, when all at once, after a day of heavy rain, the atmosphere hot, damp, and foggy, it again broke out in a most virulent form, proving fatal in from 10 to 15 hours." On the 19th of July, three days after this, the ship's company were for the first time seized; seven were attacked and four died. At this period, also, when the disease was at its height, one of the officers—the quarter-master—was attacked, and died in fifteen hours! He had been most enthusiastic in the discharge of his duty, and used every effort to enforce cleanliness among the troops. Constantly on deck, and frequently at night, he fell a victim, in all probability, to the exhausted state of his system. Dr. Fraser has appended to his Report two sketches of the vessel, from which we learn the greatest number of cases occurred on the "lee" side of the vessel. From this, up to the 11th of August, cases continued to appear, all of the same malignant type, and with few exceptions proving fatal: altogether, there were twenty-four cases, of which twelve died. Among the ship's company, seven cases; four of which sank also in a very rapid manner.

During the prevalence of cholera on board, diarrhœa prevailed also to an unusual extent, disappearing with the former, and appearing again most severely when it was at its height; of such an aggravated form, too, that many of the cases, attended with vomiting, prostration, sinking of the features, and slight cramps, might have been called "English cholera." Dr. Fraser, however, carefully refrained from returning any case as cholera, unless accompanied with the characteristic "rice water" dejections, the suppression of all the natural secretions, and other marks but too familiar of this frightful malady. The most constant symptoms of the fatal cases were: Total suppression of urine and absence of bile; to these were added a pulse nearly imperceptible—extreme prostration—the expression of the countenance of that peculiar cholera character never to be forgotten—the sunken eye, with dark circle round it—the cheeks fallen in—the dreadful anxiety in every glance—the melancholy, ghastly aspect of the worst cases. As the disease advanced, the lips became purple, the tongue cold, the shrinking of the features very intense — the voice became changed, sounding as if out of a barrel, and, before finally extinguished, husky and whispering. The symptoms varied, of course, more or less in each case. In all the fatal cases, however, except one, death took place in from ten to fifteen hours; in fact, the disease showed itself in its most malignant form; and yet, there was no reason to suspect that there was any epidemic influence, electric or atmospheric, in the air.

The plan of *treatment* found most effectual was, in the early period of the disease, emetics of salt and mustard, and after the pulse improved, camphor and calomel. The calomel and opium plan did not succeed, except in cases of English cholera. Dr. Graves's plan—acetate of lead and opium—proved most valuable in checking the profuse rice-water discharges. The sinking of the vital powers, however, seemed to advance with almost the same rapidity, whether the vomiting and purging were arrested or not. The most effectual remedy in this stage of the disease was found to be a small quantity of arrow-root and brandy. Chicken-broth, too, was given with much benefit. Dr. Searle's plan—an emetic of common salt, with calomel alone, followed up by enemata of common salt,—had no greater amount of success than any of the other modes of treatment. Galvanism was tried in one case quite moribund; "its effects were certainly wonderful, though unfortunately but transient." The only indication of life present was, an occasional gasping inspiration; the extremities were like ice; the pulse for some hours extinct; the jaw fallen; in short, all the signs of death, but this gasping respiration we have so often seen. "In this state," Dr. Fraser says, "I considered myself justified in having recourse to any means which held out even the most remote hopes of success. The result was quite striking;—the woman was completely roused, recognized and spoke to me, swallowed arrow-root and brandy, and an ammonia draught from my hands, but sunk again, and died very shortly after. Dry heat and frictions, with turpentine, sinapisms, &c., were also very generally used. In one case, the calomel and opium were preceded by venesection, the pulse being good; the result was favourable. Encouraged by it, Dr. Fraser tried it in another case, in which, from the state of the pulse, and being seen early, there was every hope of success; but this hope was not realised.

Convalescence from the disease was very tedious, and Dr. Fraser mentions a curious fact—*there was no consecutive fever*, though out of 512 men, no fewer than 320, not including women and children, had been on the sick-list. In one case of recovery, there was congestion of the lungs; in another congestion of the brain; and two suffered from gastritis. A curious question would seem to arise, seeing that half the cases of cholera recovered—how much this element in the history of cholera is owing, like puerperal and other fevers, to hospital influences or to treatment? We now reach perhaps the most interesting part of Dr. Fraser's Report. The vessel arriving off Rio Janeiro, and cholera still cutting down the troops who crowded about the decks, cheerless and spiritless, their eyes sunk in their sockets, and their countenances pale and ghastly, the two surgeons of the ship and Dr. Fraser recommended, very properly, that the men should be disembarked.

The Brazilian Government would not at first allow this, "but placed at the disposal of the troops a small island, sixty miles from the coast, whither we immediately proceeded. On our arrival there on the 13th August," continued Dr. Fraser, "I went on shore with the Colonel and Commander, and, after a sufficiently suitable site for an encampment had been determined on, I took possession of an unoccupied cottage for the sick, which we fitted up in the best way we could. We had Indian corn straw, and with some few hammocks slung from cross beams, I made arrangements in a few hours for the accommodation of eighty men, and landed the sick in the course of the afternoon of the 14th. One wing of the regiment was disembarked the same day, the other the next. The ground was broken, and not well adapted for tents; but it seemed dry, and there was abundance of excellent springs." The success of this measure is very interesting in the history of the late cholera epidemic. "The men improved wonderfully; cholera ceased to appear, and bowel complaints became at once less numerous." On re-embarking, on the 7th of September, (twenty-four days after,) those on the sick list were a few old convalescents, and cases of a trivial nature. The sick list, which for weeks before had been scarcely ever under seventy, was reduced fully two-thirds. The majority of those, on leaving the island, had all ailments of an unimportant character. Many were sick from eating a peculiar root (Cassada root) that grew on the island, of which we may perhaps take another opportunity of speaking, *but cholera had completely and entirely disappeared.* The change was too marked and sudden to say accident had anything to do with it. The ravages of the disease on board put one in mind, indeed, more of plague; or, among our more familiar diseases, small-pox, puerperal fever, or hospital erysipelas, than any purely atmospheric disease. The identity of the cases with true Asiatic cholera is, however, most remarkable. There was nothing on board to which the disease could in the remotest manner be traceable, except perhaps to malaria from the pump-well and cisterns on the lower deck, which (not unusual at sea) it was found impossible to maintain perfectly free from a disagreeable smell. Looking at the plan furnished with the Report, there certainly seems a preponderance of cases from these spots. So that, on the whole, we may conclude, that if not the parent of this miniature epidemic it was the nurse; and that the small amount of malarious-matter first received on Board at Cove increased with the voyage under its influence,—a point of the deepest practical importance in a sanitary point of view, and never, perhaps, before so well or so experimentally proved. The recovery of the troops, on escaping from the influence of this all but artificial epidemic, has likewise all the value of a successful experiment. It would be a highly interesting point to ascertain if any other vessel about this time, in anything like the same route, suffered in the same way; if not, the point is established, that want of proper sanitary arrangements, of itself alone, despite what our City Aldermen may say to the contrary, may go on generating such a condition of things as to give rise to true or so called Asiatic cholera.

HOSPITAL REPORTS.

ST. BARTHOLOMEW'S HOSPITAL.

TUMOUR OF THE JAW.

The most interesting feature in this case was the apparent source of the growth. The patient, who was quite young, presented a swelling, about the size of a chesnut, on the anterior and upper part of the inferior maxilla, near the angle of the mouth. It was hard, and not of that kind on which treatment could make any impression, and Mr. Wormald therefore decided on removing it.

The operator, grasping the cheek so as to make it tense, passed his bistoury through it from within outwards, on a line with the commissure of the mouth, and about an inch from this, towards which he cuts. Two arteries were divided, which bled very freely at first, but were soon stopped; the cheek was then detached and the tumour exposed. The surgeon sawed it off at its base, when it was found to be hollow, and a tooth was seen in the cavity. This was extracted, and the divided surfaces very carefully united by stitches.

Was, then, the abnormal position of the tooth the cause of this tumour? Every feature in the case seems to warrant in giving an answer in the affirmative?

DISEASE OF THE KNEE JOINT.—AMPUTATION.

The next case was one of those maladies which imperatively demand the urgent consideration of every surgeon, and which, indeed, no one denies to them. "Diseases of the joints," says Sir Benjamin Brodie, "are a class of diseases having strong claims on the attention of the surgeon, since they are of very frequent occurrence, are a source of serious anxiety to the patient, and for the most part, if neglected, proceed to an unfavourable termination." It will, then, not be at all surprising that we should turn to this case with more than common interest, and seek to set forth in the strongest light any interesting features it may offer.

The patient, a man of temperate habits, a wine-cooper by trade, tells us, that till about five

years ago he had always enjoyed tolerable health, and that at this time he somewhat injured the joint by running. Some swelling came on; but this abated, —only partially, however, for seven or eight weeks after he had to enter Guy's Hospital. Here the knee was blistered and strapped, and he went out better. He returned to work and neglected it, and the joint got steadily worse till last summer, when he was obliged to give up work, and soon after came into the Hospital under the care of Mr. Lawrence.

The knee was again blistered and strapped, and he thought it became stronger. One point of suppuration seemed near enough to open, and the patient being then under Mr. Skey's care, (Mr. Lawrence was out of town,) this gentleman decided upon opening it; about half an ounce of thin bloody fluid escaped; acute inflammation of the joint came on, and eventually ulceration of the cartilages. Various means were tried, but the disease progressed, till at last there was no chance but amputation.

The patient having been brought into the theatre, and chloroform administered, Mr. Lawrence entered the knife at the further side of the limb, and carried the incision round on the anterior face of it with a steady sweep till he reached a point opposite where he had begun, and rapidly dissected up the flap, carrying with it all the structures as far as the fascia. The same process was renewed on the posterior surface, when the muscles were divided and the bone sawn through. The operation was then completed in the usual way.

On opening the joint it was found divided into three compartments by septa of synovial membrane; one corresponding to each head of the tibia, and one to the articulation of the fibula with the femur. The cartilages had been removed by ulceration, exposing the bone, which was carious. The synovial membrane had undergone pulpy degeneration.

Thus this case presents to us an example of the steady progress this disease makes when neglected by the patient, and unchecked by treatment. We see it passing through all its phases, from the more simple to the more complex forms. The joint is wrenched, or some morbid impression is made on it, and subacute inflammation sets in, followed by increase of the natural secretion of the membrane. By-and-by this membrane undergoes degeneration, and the joint becomes permanently enlarged. The cartilages are absorbed and caries of the bone follows, so that the limb must be lost or the patient dies. But not less truly does this case show us that there is a wide and impassable line between this and the purulent or scrofulous affection of the joints.

KING'S COLLEGE HOSPITAL.

EMPYEMA OF FOUR YEARS' DURATION, CONSEQUENT UPON PHTHISIS.—TAPPING.—CLINICAL REMARKS BY DR. BUDD.

The great length of time during which the patient lived, subsequently to the effusion of pus into the cavity of the pleura, and the comparatively little suffering which he had during the chief portion of that period, render this a case of considerable interest. We are happy to have the opportunity of presenting it to our readers, together with the clinical remarks of Dr. Budd, the distinguished physician under whose care the case occurred.

The man, aged 21, who came of a very healthy family, and had always been temperate, was first admitted into King's College Hospital on April 24th, 1846. He had suffered, as long as he could recollect, from a morning cough, with grey mucous expectoration, and six months before admission he spat up nearly two pints of florid blood, a month after another pint mixed with much mucus, and in six days another pint. The cough became now more frequent, the expectorated matter thick, opaque, and in pellets; his appetite failed, he lost flesh, and had night sweats and chills; in fact, all the symptoms of tubercular disease of the lungs. While in bed, a fortnight before applying at the hospital, he suddenly felt a sharp, stabbing pain on the left side, at first in one spot, afterwards spreading over that side of the chest, and accompanied with great difficulty of breathing. The pain continued severe during the following day, and he remarked that his heart was beating on the right side. He had, also, pain from the upper part of the sternum to the hypochondrium, the consequence of the displacement of the heart, but it did not last long.

When brought in he had difficulty in breathing, and pain in the left side. The presence of air was easily discovered in this pleura by various signs. It was half an inch larger than the opposite side, and motionless; there were no sounds of breathing, except at the summit, where there was still a little murmur, amphoric resonance, and general clearness, or, rather, a drum-like sound, on percussion. On the right side the respiratory murmur was loud and healthy in the lower lobes, but crepitus was heard in the upper. The heart was pushed over to the right side, the apex beating between the third and fourth ribs, just internal to the mamma. The coughing was hard, the expectoration muco-purulent. Pulse, 180; respiration, 26. The constitutional symptoms were slight, considering the nature of the complaint.

May 8.—No great change in his condition. The fever and difficulty of breathing had increased, compelling him to lie with his shoulders raised. The expectoration continued purulent; the distension of the left side, and the crepitus in the right, remained as before. The pulse and respiration accelerated.

On the 11th the pain had left him, and the weight and tightness were less. The appetite returned. He amused himself and the other patients by jerking his body sharply about, by which means a splashing was heard, as of a cask half full of water. On the ensuing day a remarkable disposition to hæmorrhage manifested itself. The urine passed during the night was highly tinged with blood; the fæces were coloured; the nose bled, purpuric spots appeared in various parts of the body and limbs, and there were spots on the sclerotic and mucous membrane of the tongue, and the sputa were tinged. Decoction of logwood, and afterwards sulphuric acid, were given, and continued until the 15th, when, thinking he was about to die, he went home to his friends. Three days afterwards, the hæmorrhage began to diminish, and continued to do so until the end of May. By this time the purpuric spots had faded, his condition had much improved, and he was able to sit up. He attributed his amendment to the profuse bleeding. The physical chest symptoms remained as before. No further notes were taken of his case until August, when the amphoric resonance and splashing were gone, the air having been absorbed, and liquid filling the pleura. The heart remained as much displaced as before. He was able to get about and do some work.

When seen in October of the same year, he had become stouter and stronger, and was following his usual occupation. The chest remained as much distended as before. In this state he continued for three years, his cough and expectoration having been, during the greater part of this time, considerably less troublesome than before perforation of the lung took place. His chief complaint was difficulty of breathing after exercise. He was also a little thinner.

On the 23rd of last October, he was seized with great dyspnœa from catarrhal affection of the right lung, as indicated by rhonchus and sibillus, &c. The left side was greatly distended, but respiratory sounds, as well as those of the heart, could be distinctly heard all over it. That they did not depend upon a return of the heart to its proper position, and upon the action of the lung, was shown by their similarity and continuity with those on the opposite side becoming louder and louder towards that part; the sound depending upon conduction through the fluid.

The man was tapped by Mr. Partridge, between the fifth and sixth ribs. A valvular aperture being first made, the trocar and canula were thrust into the chest; the trocar was then withdrawn and replaced by a stopcock, to prevent the admission of air. A quantity of fetid pus was drawn off, and it continued flowing during the three following days. The chest became smaller, and the breathing was relieved. In a day or two, some pus which had collected in the areolar tissue around the wound was let out, and matter continued to be discharged, even as much as half a pint in a day, until the following January; yet the side did not contract, but became permanently larger. His pulse became rapid, with hectic fever and dropsical swelling of the face, legs, and hands, and he died on March 30.

Post-mortem.—The left side of the chest was enormously distended and full of pus. The lung was flattened and pressed against the upper and back part, where it was bound down by coarse membranous bands. The lower lobes resembled dark areolar tissue, and a small portion of the upper lobe alone allowed the air to enter. In the upper half of this, as well as of the right lung, were several chalky or cheesy masses of considerable size.

The heart was found in the locality where it had been felt beating, but not fastened by any abnormal adhesions. The other organs were healthy. Dr. Budd drew the attention of his hearers to the fact of the man having lived for four years after the symptoms of perforation took place. Perforation of the lung is usually caused, as in this man, by the bursting of a tubercular cavity into the pleura; through this the air passes when there are no adhesions, fills the pleura, and compresses the lung. The air and tuberculous matter set up inflammation and consequent suppuration; and the air is gradually displaced by the pus, which becomes effused. Air alone may be drawn into the pleura in sufficient quantity to displace the heart and compress the lung; for the violent efforts which the patient makes to relieve the dyspnœa serve only to increase its cause.

Dr. Budd referred to two cases of perforation, where life was protracted for six weeks, the longest period that he had known, as they usually prove fatal in a few days. What rendered more remarkable the long period which this man survived were his poverty, the privations which he underwent, and the unhealthy locality in which he resided, a low lodging-house near Drury-lane.

Another interesting point in this history was the profuse hæmorrhage from the kidneys and other mucous membranes when he was first attacked, and which seemed likely to destroy life speedily. The bleeding ceased in three weeks, and probably prolonged life, as the man himself believed, by relieving the breathing. Dyspnœa from suspended action is usually much relieved by venesection, as in cases of pleurisy and pneumonia, in which it seems to act, not by arresting the inflammation, but by diminishing the quantity of blood which passes through the lung, and so lessening the amount of work to be performed by that organ. This is seen even more clearly in consumption, where a great portion of the lung may be diseased without distress of breathing, the blood having been gradually diminished to such an extent, that the sound portion of lung is able to purify all the blood which is circulated through it.

The displacement of the heart, and the little effect produced by it, are also worthy of notice. Though distinctly felt and seen on the right side, there were no symptoms of impeded circulation until a few months before death, and at no period could any irregularity or morbid bruit be detected.

The stethoscopic phenomena were, first, those of air, and in two or three weeks liquid began to collect. It was on May 11 that the man himself perceived the splashing. This, which is only to be heard when fluid and air are in the cavity, is curious, as having been first noticed by Hippocrates. It continued until May 29, and probably longer, but there was no account kept until August, when the air had all been absorbed, and the pleura was filled by liquid only. The sounds of the heart, as well as those of respiration, were distinctly heard all over both sides of the chest, which led some to doubt as to the presence of pus in the left pleura. This was the more interesting, it having been decided to tap. That the sounds depended merely on the conduction of the fluid, could, however, be readily detected by their increasing intensity, as the stethoscope was carried to the sound side.

In the treatment of effusions of fluid into the cavities of the pleura, it is important to discover whether it be serum and lymph, or pus, for the former may be absorbed, while the latter is never taken up or diminished in quantity, unless through the lung or the wall of the chest. How, then, can these be distinguished? The inflammation produced in this way is always suppurative. When pus

is effused the chest does not contract, but grows larger, unless the matter be discharged. The pus does not coagulate, but always remains liquid; therefore it is never followed by friction sound. If there be pleurisy, with large effusion, the chest will become smaller, and perhaps a friction sound be heard as the surfaces roughened by lymph come in contact, and the patient will recover, with a contracted chest.

Was it expedient to tap, and, if so, what were the indications? While air remained in the chest, and the lung was unrepaired, it was manifestly useless. After some months, when the opening in the lung closed, the air was absorbed, and pus effused. It remained in this state for three years, without any great difficulty of breathing. In this condition, also, tapping was inexpedient, especially as the lung would not have expanded to fill the chest, and the constant discharge would have exhausted the patient. But, when great anxiety of breathing from catarrh supervened, he was tapped, and thus relieved for a time; but the drain, in the course of three months, caused his death. But the most interesting circumstance was, the effect of the perforation, and stoppage of the breathing, or some concomitant of these, in arresting the progress of the tubercular disease. When brought in, he had all the various symptoms of tubercle in both lungs; he afterwards lived in London, worked for his living, and endured privations, and yet, when he died, the disease was not more extensive than when he was first brought in. This statement applies equally to both lungs.

The probable cause of this amendment, or rather arrest, was the profuse hæmorrhage, and the alteration in the constitution of the blood; or it might have arisen from the displacement of the heart, and the effect thus produced on the circulation. All these agents might influence the nutrition of the lung. It has been noticed by a distinguished physician of Vienna, that organic diseases of the heart, malformation of the chest, large tumours, contraction of one side, &c., tend to prevent the advance of tuberculous disease. It is, therefore, not unlikely that the perforation did, in this case, prolong the patient's life, though it is usually so speedily fatal. There was no change in the circumstances or habits of the man: we are, therefore justified in referring these results to causes from within.

LONDON HOSPITAL.

DISLOCATION OF THE HIP INTO THE OBTURATOR FORAMEN.—REDUCTION AFTER ONE MONTH.

On Monday, May 27, a healthy, robust labourer, aged 32, was admitted under Mr. Adams, suffering from this form of dislocation, which he had received a month before by the falling of several hundred weight of earth, whilst he was engaged at work on a railway, the mass striking him on his left hip, when the leg of that side was extended behind him in the act of escaping.

On admission into the Hospital, his left leg was found widely separated from the other and thrown forward, the foot preserving its straight direction and resting on the toes, whilst his body was bent forwards inclining to the dislocated side.

The great trochanter was depressed, and much less prominent than on the other side; there was a degree of fulness on the anterior and inner aspect of the thigh, where by making firm pressure the head of the bone could be felt indistinctly under the adductor muscles; its presence was also indicated by the numbness which was experienced in the course of the distribution of the obturator nerve.

A tape carried from the spinous process of the ilium to the inner malleolus was one inch shorter on the affected than the healthy side; but when drawn from the symphysis pubis, a lengthening of two inches and a half was found to exist.

As attempts to reduce the dislocation had been already made but a few days before his application, it was deemed advisable to wait a short time before again attempting its reduction, when this was effected with comparative facility in the following manner:—The patient being placed on his back on a sofa, with his legs on either side of a post fixed in the floor, and close up to the perinæum, gradual extension was made with the pulleys, in such a manner as to bring the leg of the dislocated side much across the median line, and thus to make the post the fulcrum by which the head of the bone might be returned to its socket; then, by slackening the cord and simultaneously pressing the knee powerfully inwards, and rotating the foot outwards, the head of the femur slipped quietly into the acetabulum.

The only, but best symptom by which this was known to have taken place, was the restoration of the limb to its natural position, as the snap, which usually indicates the return of a dislocated part, was here absent, owing, no doubt, to the length of time during which the dislocation had existed; for it is probable, that the glutei muscles having been so long upon the stretch had lost their power, and the acetabulum become partly filled with fibrinous matter.

In some clinical remarks upon this case, Mr. Adams pointed out the necessity in this form of dislocation, where the head of the femur was downwards and inwards, of using not only extension, but also of employing means by which it might be forced into its natural position; and he mentioned four cases of this dislocation which occurred some years since in this hospital, in which the plan he had here adopted had been attended with successful results.

The apparent shortening of the limb, which was noticed when the tape was carried from the spine of the ilium to the malleolus, was owing not to any real shortening of the limb—for the reverse was the case—but to the oblique manner in which the dislocated leg was placed in reference to this line.

FRACTURED RIB.—HÆMATURIA.

An interesting case of obstinate hæmaturia, consequent on an injury to the loins, has lately occurred in the wards, in a man, aged 42, under the care of Mr. Curling, who was admitted in consequence of having fallen on his left side across a piece of timber, by which one of the floating ribs was fractured.

On his application he was faint, and complained of great pain in his loins, having walked with difficulty to the hospital.

Two days after his admission, he complained of a sense of fulness, with aching pains in the region of the left kidney, and slight pain on pressure.

There was frequent desire to pass water, which was attended with a scalding pain. The urine was of a dark red colour, and contained a few small coagula of blood at its bottom.

He was ordered to be cupped over the left kidney, and the following Medicine:—Mist. Acid; 6tis horis; p. Doveri, gr. x. o. n.

March 7.—The pain in the loins continues; and the urine is still of the same character. To repeat the cupping, and the following mixture:—Acidi Gallici, gr. v.; acid hydrocyan., ɱ ij.; Tr. hyoscyam., ɱ xx. ter die.

By steady perseverance with this medicine, the urine became gradually less charged with blood, and the pain in the loins subsided. The man improved in health; and at the end of five weeks was allowed to get up, the urine at this time having become almost natural, when, apparently from some slight exertion in lifting the weight of a few pounds to his head, the uneasiness and aching in the loins re-appeared, and he passed a large quantity of blood of a bright red colour, amounting to a pint and a half, which speedily formed the usual coagulum. The sudden loss of so large a quantity rendered him faint and anæmic.

Ordered cat. sinapis lumborum, and gallic and sulphuric acids internally.

Considerable difficulty was now experienced in micturition, which could only be effected when the patient placed himself in the prone position. This appeared to arise from the presence of a large coagulum in the bladder, blocking up the orifice of the urethra when the man was in the upright posture.

The hæmaturia still continued; the urine forming a small coagulum for several days; but this gradually disappeared, and it was then passed in a similar state to that which preceded this attack.

The acetate of lead was administered at this period. The urine gradually became clearer, until it almost resumed its natural appearance. As this improvement took place, so did his health; his lips, which had been blanched, slowly recovering their colour, and the patient's strength increased.

The relief, however, was but temporary, for, on April 19, a fresh attack, if anything, more severe than the preceding, occurred, and accompanied by the same symptoms. Similar treatment to that adopted in the preceding attack was pursued, but with no marked success in arresting the discharge of blood.

A third attack occurred in May 7th, when as much as two pints were passed, rendering him faint and insensible for some time. The tincture of the sesqui-chloride of iron in doses of ɱxx., shortly increased to ɱxl., was now administered every four hours, whilst blisters were applied to the loins. This has had the desired effect, the urine soon losing its unnatural character, and the man's health rapidly recovering under its use. No symptoms of hæmaturia have occurred for the last three weeks, and the patient's strength was so far improved that he was discharged on June 4th.

From the circumstance of the hæmaturia having followed an injury to the loins, each attack having been accompanied by a fixed pain there, with the absence of symptoms of vesical disease, fully proves that the source of the blood was the kidney, and consequently the treatment was directed more especially to that organ.

SELECTIONS FROM FOREIGN JOURNALS.

THE URINARY SECRETION OF THE INSANE.

This subject has lately been carefully examined by C. B. Heinrich, of Königsberg, who, in his recent observations, cites the earlier ones of Erlenmeyer, Sutherland, Rigby, and himself.

There was formerly an opinion that the urine of the insane had a great tendency to alkalescence. The author now retracts his previous defence of this statement, since, out of 100 cases examined by him, he found that in 85 the urine possessed a more or less acid reaction, while in 15 it was neutral. Even in cases of paralysis he has not found it alkaline. One instance is cited by him, in which, coincidently with symptoms of diseased spinal chord, the acid reaction of the urine was extremely feeble. But here the secretion was exceedingly dilute, and contained a very small quantity of urio acid, so that little stress can be laid on it. And on the whole, he is of opinion that the alkaline reaction of the urine, where it occurs, depends solely on a retention of the secretion, due to the paralysis (of the bladder) often present in the insane.

The author confirms his previous opinion as to the frequency of an abnormal quantity of fat and elain in the urine of the insane, by adducing thirteen cases from his own observations. In these, all mixture of the urine with fatty matters of the urethra and genitals was obviated by obtaining it directly from the bladder with a catheter. The microscope showed a variable quantity of fatty vesicles. On comparing these cases with the history of their diseases, it was found that seven were connected with tubercles of the lungs, while almost all the remainder exhibited a scrofulous or a cacheotic habit. In one of them there was a granular hardening of great part of the liver. The mental affections belonged to the most different forms, and the different urines exhibited little correspondence in any other respect. Some of them contained albumen. The author concludes that the appearance of fat in the urine in these cases depends on the functional deviations of the organs mentioned, and has no more immediate connexion with the principal disease. The urine has thus as little import as the pulse on the semeiology of insanity.—*Abridged from Schmidt's Jahrbucher-Jahrgang.* 1850. No. 1.

ATELECTASIS(a) OF THE LUNGS.

Professor Köstlin, of Stuttgart, narrates a case of great interest, under this heading. A woman, of 22 years, died of acute peritonitis. Besides the

(a) The word is more usually spelt atalectasis, from αταλος and εκτασις, signifying a protracted youth (of the organ). As spelt above, it would probably be derived from ατελης and εκτασις, and would so merely imply a protracted imperfection, without any further reference to its nature.—Ed. *Med. Times.*

ordinary appearances, the section revealed a singular condition of the lungs. The right lung sent off a large, flat, and almost quadrangular process, which consisted of the middle lobe and about half of the upper, and which filled up the upper and anterior half of the chest, even to the left subclavicular region, where it supplied the place of the left lung. Exteriorly to the heart no left lung could be found, the pericardium being united to the inner surface of the ribs by a loose and completely developed areolar tissue. A more careful research discovered the left lung as a small flat body, the breadth of which doubled its height, and which lay on the side of the vertebral column, behind the upper part of the heart. It received its proper bronchus and vessels, and in its form the ordinary shape and subdivisions were readily recognised. Its inner border was rather blunt and thick; its outer, sharp and smooth. The apex was of small size, but smooth antero-posteriorly. The base was far removed from the midriff, but yet provided with a distinct diaphragmatic surface; while, on account of the flatness of the whole organ, this was directed to the posterior surface of the heart, rather than directly downwards. The anterior and posterior surfaces of the lung were convex, especially the former of the two. The separation into an upper and under lobe was complete. A small incision passed inwards and upwards from the outer border to the middle of the lung; and from thence a small furrow was continued in the same direction to the inner border. The right lung was of about 12in. in height, and 5½ in. in breadth; the left about 4½ in. in height, 2¼ in. in breadth, and three quarters of an inch in thickness. The left pleural sac exactly corresponded in size to its contained lung; it included neither recent nor old exsudation. In almost the whole of its extent it was quite normal: only the inner border of the lung, from the entry of the bronchus to the apex, was occupied by an old, completely organized, thin, and short adhesion of the two pleural surfaces.

At the smooth margins of the lung scarcely any parenchyma could be found. Elsewhere the pulmonary substance was flabby, weak, and not brittle, but rather less resistent than usual. On the surface and interiorly, its colour was a pale brownish violet, which was speckled in the ordinary way with black pigment. Under the pleura, the separation into lobules was seen as white even lines, giving the lung a mosaic appearance. The cut surface was smooth and almost devoid of air: it was only at wide intervals that little groups of pulmonary vesicles appeared to contain any air. Some pieces of the lung sank in water. The left bronchus, at its entry, had a diameter of about half the normal size; it divided into numerous branches of the size of a quill. The larger or visible branches of these on the lung were everywhere open, and of normal character.

The microscopic appearances were those of atelectasis. The pavement epithelium of the finest bronchi was wanting: scarcely any fragments being visible. So also the nuclei of the amorphous vesicular membrane were smooth and ill-defined. The elastic fibres, although present, did not exhibit their ordinary arrangement, being puckered and wrinkled up in little masses, instead of uniting in uniform arches. The author also found groups of small smooth yellow bodies strewed almost everywhere through the lung. They were unaffected by acetic acid; and offered a close resemblance to some bodies which he has found in young atelectasic lungs, and has described as fœtal blood corpuscles, the mother cells of which have been destroyed or absorbed.

The history offered the following details:—Up to the fourth year, the health was tolerably good. From thence to the eleventh year, there was continual bronchial catarrh, which was sometimes croupy and dangerous. At the approach of puberty this ceased. There was an inconsiderable but distinct lateral curvature of the vertebral column. Respiration was quite unaffected.

The exact correspondence of the pleural sac, the patulous state of the bronchi, and the absence of pleuritic effusion in any quantity, show that this condition of the lung cannot be ascribed to compression by a pleuritic effusion of old standing.

The author regards the smallness of the left lung as due to an arrest of development, first occurring immediately after birth. In the first inspiration, air was received into a few groups of vesicles only; the greater part remained fœtal, and in a state of atelectasis. The finer bronchi and the pulmonary vesicles were completely arrested, and, instead of advancing with growth, rather retrograded. This atelectasis did not prove fatal, but gave rise to very serious bronchial catarrhs,—a result which Friedleben has especially noticed. This may have aided the dilatation of the bronchi, and was, no doubt, associated with the trifling pleuritic exsudation noticed. It is only at the arrival of puberty that the organism seems to have fully compensated the deficiency of the smallness and atrophy of the left lung. —*Archiv. für Phys. Heilkunde*, viii. 6, 7.

METHOD OF DEPRIVING QUININE OF ITS BITTERNESS.

Dr. Richard H. Thomas, of Baltimore, reports the discovery of a method by which quinine may be quite deprived of its great bitterness without injuring its virtues. He combines two grains of tannic acid with ten of quinine.—*Amer. Jour. Med. Science*, April, 1850.

ON GLEET AND ITS TREATMENT.

Dr. Johnson, of Baltimore, is of opinion that the prostate is the seat of obstinate gleet. He treats it with great success as follows;—

℞ Strychnia, gr. ij.; acid net. fort. g. iv.; aq., ℥ij. gt. sol. sig. Inject one drachm thrice a day, after urination.

℞ Ext. nucis vomicæ, gr. xii.; sulph. quiniæ; ext. hyoscam. aa gr. xxiv. M. In pil. xxiv. divid. sig. Two pills to be taken an hour before each meal.—*Ibid.*

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THE MEDICAL TIMES.

SATURDAY, JUNE 15, 1850.

Notwithstanding that the late decision respecting the decorations for Military Surgeons has caused great dissatisfaction to some, yet we see and hear but little about it. The whole affair has not given rise to so much comment, and so many disputes and resolutions, as a decision of the body corporate in Lincoln's-inn-fields, or the discovery of a specific for the gout. No great meetings have been held to express the feeling of the assembled Medical men; no Societies have been called into birth to commemorate the advent of the long-looked-for boon. The truth is, men have pretty well made up their minds, that military decorations are not the thing for a Surgeon, and that Surgeons, being civil, are only justified in taking civil decorations, these being more in consonance with a humane and elevating Profession like ours, than the show and pomp of martial honours; and this opinion will soon triumph over that which supports the right of Medical men to military honours, on the ground that they are exposed to danger. The inhabitants of a besieged town, and the traveller in the vicinity of a battle, might plead the same thing. But there is one feature in the affair, applicable to both civil and military surgeons, to which we wish to call especial attention; it is the reluctance, the tardiness in granting any honours whatever to Medical men, and then not granting them to the proper extent. Why should not the highest honours of the State be open to a surgeon, as to barrister or clergyman?

Hence the feeling, that there is a great deal to be done for the Civil Surgeon; and that it will not be done, though not loudly expressed, rankles deep in the minds of men. This feeling of disappointment, in those who have most right to expect titles, would have been more cordially shared, had they possessed the confidence of their fellow Medical men. But this they forfeited; and, the act being their own doing, they must now pay the penalty. Had they, in their hour of strength, cared more for the mass of their Medical brethren, the latter would have stood by them in the hour of struggle, and perhaps have been not altogether powerless in aiding them to redress the injustice they have suffered.

Setting aside, however, the feeling of jealousy which always, to some extent, pervades a Profession, split up, in a great measure, into two classes, it is an undoubted and natural fact, that Medical men consider the leaders of the Profession as being fairly entitled to much higher honours than are ever conceded to them, and out of which they have only been kept by those accidental circumstances on which thrones and cabinets rest, and which we cannot always controvert, even when we know them to be false.

It would be a wonder if it were otherwise. Surgeons, Physicians, and even "amphibious" General Practitioners, do a great deal more to promote the weal of mankind, and work a great deal harder, than any other class of professional men. Yet, as regards power and honours, they are mere nullities. A country parson may become a spiritual prince, an autocrat, from whose decision there is scarcely any appeal. A barrister may become a peer, and, in his faculty, wealth and power are attainable at an early age. But, in England at least, a Surgeon or Physician may toil for years, —may make discoveries which save the lives of thousands, and alleviate the sufferings of millions,—and yet sink into the tomb, poor and unhonoured; for our enlightened Government would, in such a case, grant him neither a pension nor a title.

The inference is but too true; there are facts enough to justify it. A wealthy banker is made a Baron, because he has accumulated money, not because he ever rendered his country a service which, in the slightest degree, personally inconvenienced him. A Mayor has the honour to kiss Her Majesty's hand, and rises a Knight, for having dined 500 people and headed a show. A rich merchant gives his daughter 50,000*l.* in portion, and marries her to a Lord Steward's son; a baronetcy rewards the costly dower. But a man like John Hunter or Edward Jenner is, at the utmost, never honoured by anything more than mere knighthood, and that grudgingly doled out to him at a period when the iron has entered his soul too deeply to admit of his deriving any gratification from it, and when, chilled and worn down by ingratitude, neglect, and hard labour, the old man tends towards the tomb, and acknowledges the

justice of the saying, that persecution ever awaits the benefactors of the human race.

Again, how different is it in other countries! Oehlenschlaeger dies, and a nation mourns the event. A composer passes away from this fitful dream of change; the highest and noblest of the land consecrate, in unfading terms, his virtues and his merits, and prince and people, loudly reverting to days gone by, speak with pride of their acquaintance with the great being who has left them for ever.

It is precisely for this reason that we wish to bring the matter as prominently as possible before our readers. Looked at only in this point of view the prospect is, it is true, discouraging enough; but it is from the bottom of this bitter cup that the neglected man of science may draw his best consolation. Let no ardent aspirant after Medical honours flatter himself that, in his time, the matter will be amended. So long as close boroughmongers continue to be slipped into the Lower House, and the Upper be recruited from bankers, merchants, farmers, &c., to the exclusion of men of talent and science, so long will matters remain in this state of mismanagement. The arguments used in favour of this system are false and flimsy. The spirit of Mr. Pitt has passed uncontaminated through a long line of descendants to the present Ministry. It was Mr. Pitt who had the astonishing hardihood to say, when General Walpole proposed that Nelson should be promoted to something higher than a mere barony, that he would oppose this on the ground, that "Admiral Nelson's fame would be co-equal with the British name, and it would be remembered that he had obtained the greatest naval victory on record, when no man would think of asking whether he had been created a Baron, a Viscount, or an Earl." Could any one have pronounced a more damning judgment, a more striking satire, on these honours and the system under which they were distributed? Nelson, brave, generous, patriotic, and unselfish, was the darling of the English nation; but the Minister raised the very same plea against giving him a peerage which his successor would do against giving one to the most eminent medical man.

But there is a consolation in store for the neglected surgeon and physician, of which no Government could deprive him, and no misappreciation can lessen. It may be laid down as an axiom, that the balance of fame is beautifully preserved. The singer, the player, the dancer, who monopolize for the season even more attention and honours than the statesman who saves a country, or the soldier who conquers one, are forgotten much sooner. The sternly-established fame of a man of science requires centuries to reveal its splendour, and the poet is remembered and loved when men have even forgotten how to pronounce the names of those who looked down on him during life. The discoverer in medicine will have a still brighter advent. The day will come—the day, however distant—when physiology, absorbing into itself, and rendering tributary all other sciences, will become the centre of all the knowledge and intelligence of the universe. Then indeed will Medicine take its proper station. Then will Hunter stand, in all men's eyes, on a level with Newton; and Sydenham and Laennec be as familiar in men's mouths as Cervantes and Galileo. They for whom such a hereafter is reserved may well dispense with honours.

POOR-LAW MEDICAL OFFICERS.

The Committee of Poor-law Medical Officers some time since issued an advertisement, a copy of which was sent to each Member of Parliament, calling public attention to the very low and inadequate remuneration paid for Medical service to the poor, and contrasting such payments with the lavish salaries given to the Secretaries of the Poor-law Board for performing duties that were, in some instances, merely nominal, and unattended with important responsibilities. Soon after this circular was issued, a debate took place in the House of Commons upon the expenditure of the country, and among other matters the salary of Lord Ebrington, one of the Secretaries of the Poor-law Board, was canvassed, and was ultimately referred to the Committee now sitting on official salaries for consideration.

It is manifest that the House of Commons are more disposed to listen to the remonstrances of the Poor-law Surgeons, when they can be turned to the purpose of cutting down salaries than when they are confined to the simple object of raising the remuneration of those ill-paid officers themselves. The bold course taken by the Committee, in the publication of their advertisement, will, however, serve to show the Poor-law Board, that unless the Medical Officers be justly and considerately treated, the Committee are prepared to try their strength with the Poor-law Board itself, and to wring from its fears what they cannot obtain from its justice. This Board has recently behaved with unfriendliness and rigour towards Union Surgeons, and, unless the Committee show a resolute determination to defend their brethren, they will be crushed by the insatiable vindictiveness of official resentment. We are satisfied that a vigorous agitation will scare the Board from its meditated quarry.

THE PUFFING GAZETTE.

Among the arts employed by charlatans to advance their private fortunes, is that of affecting an exaggerated concern for public interests. Hypocrisy is at a premium when honest men neglect the duty of exposing it. The cry of the braggart and the mock patriot is so closely imitative of the masculine tones of the tribune, that few who are unlearned in the craft can distinguish the false note. The arguments of a Catiline and a Cicero are near akin, but character reveals the difference of intent; and in all the transactions of life, personal or political, the *morale* of the agent is the only sure criterion by which the public can form an estimate of the worth of his advocacy. "Measures, not men," is a canon of heterodoxy; the knave's profession of faith; and the assertion of a ridiculous expectation, that men may *do* better than they *are*. As a rule of life nothing could be more delusive or ruinous;—hence, on the broad scale, so much bad, false, and deceitful legislation. Men who are indifferent to the principles of the measure they patronise, lose their circumspection, and indolently permit artful men to dishonour their work. This shall not be our fault.

We guard our readers against an artifice for advertising the *Lancet*, having for its ostensible object the ascertainment of the sentiments of the Profession upon the subject of Medical Reform. We do not apprehend that many replies will be made to the circular, as any man, with ordinary common sense, will in an instant discover, that it is in reality an advertisement, and, if it really have not, ought to have paid duty at the Stamp Office.

But, if any individual should be deceived by appearances, and be so inept as to conclude that it is his duty to return an answer, we tell him that, answer as he may, the result cannot influence, in the slightest degree, the settlement of the great question of Medical Reform. He may, therefore, save himself the trouble. Every Member of the College of Surgeons would prefer the full enjoyment of the representative principle in that College to the privilege of membership in a new one; and probably every other General Practitioner, if this point were in question, would prefer to be enrolled in the College of Surgeons than to be embraced in a new institution. This is not, however, the point upon which the policy of the National Institute has turned; it is because the governing body of the College of Surgeons has successfully resisted the *almost unanimous wish* of the Members, and because the Government will not coerce the Council of the College, that the National Institute have demanded from the Government a new incorporation for the General Practitioners. How can the Council of the College be made to yield? Not surely by such a trumpery procedure as the Editor of the *Lancet* has adopted.

We observe that it is the intention of the National Institute to take the sense of the Profession upon the actual questions that divide the opinions of the General Practitioners; and we hope that our readers will wait until that body have been able to make their arrangements.

REVIEWS.

On Diseases of Menstruation and Ovarian Inflammation, in connexion with Sterility, Pelvic Tumours, and Affections of the Womb. By Ed. John Tilt, M.D., Physician to the Farringdon General Dispensary, and to the Paddington Free Dispensary for the Diseases of Women and Children. 8vo. Pp. 250. London: Churchill. 1850.

The relation subsisting between inflammation, taken in the widest sense of the word, and a numerous host of diseases to which the human frame is liable, has been investigated since the opening of the present century with no small degree of precision, and, in many instances, with a happy result. With the exception of the laws of organization itself, there is no mode of action carried on in the diseased functions of the living body, whether these are merely functional in their nature, and therefore usually of a brief duration, or organic in their final tendencies, and consequently too often of a most protracted disposition, which has arrested more intensely the speculation of pathologists, and deservedly, too, than the multifarious group of inflammations, and all their subordinate ramifications and sequelæ. While, however, this is frankly admitted, in the main, to be sound and judicious, it must, nevertheless, be conceded, that there is an insensible tendency in all writers espousing these special views, to be, per-

haps, a little *ultra* in their conception, so that their propositions, at times, require to be softened down a little, or, as it is in common parlance, they require to be taken *cum grano salis*. This, it is true, may apply to all theories, whatever may be the topic which they profess to illustrate; but it is, in all probability, more legitimately applicable to Medical theorists, and the partizans of every sect, whether the Hydropathist, the Homœopathist, or any other *ist* that this age, so fertile in its fancy, may suggest or create.

That there is a marked difference in the *acting conditions* of the functions of the human body, whether they are of the animal system peculiarly and exclusively, or of the lower group, the organic properly so considered, it is not necessary for us to reiterate in this place. We are not, however, aware, that sufficient attention has been given to the broad distinction that subsists between the actual organic functions, usually so named, and the no less organic, but likewise positively creative functions, which impart the distinctive characters to the two sexes, and are known collectively as the organs of reproduction. For, assuming as a truth the broad basis of that pathology which rests on inflammation as the great pathological element of our more important and most numerous diseases, it would appear self-evident, that the most marked, most clear, most explicit, and most undisputed evidences of its influence, would be displayed in those tissues or viscera, which, in common with all the other parts of the animal body, possess the organism of life, and have, in addition, the organism of reproduction or creation attached, destined to the exercise of what Blumenbach has so appositely named the *nisus formativus*. We would not be understood as expressing an analogy, still less an identity, between a state of inflammation, pathologically so considered, and the evolution of the ovule and its growth while its time is perfected in the uterus; yet there are too many points of resemblance which naturally present themselves for consideration, both to the general philosopher as well as to the pathological inquirer into the history and nature of diseases, and connected with the generative system in the female.

The present work is on the Diseases of Menstruation and Ovarian Inflammation, in connexion with Sterility, Pelvic Tumours, and Affections of the Womb. The Author, commencing with the beginning, makes a few remarks on the uncertainty of the healing art, which he endeavours to connect with the negligent use of words, or the misconceptions arising from their vague and undefined use. He next analyses the numerous and most anomalous conditions which are pathologically considered under the common terms amenorrhœa, dysmenorrhœa, menorrhagia, leucorrhœa, and hysteria; subsequently he examines the organs and the functions of menstruation. He remarks—

"What have we not seen lately in a neighbouring country, under the influence of the word *inflammation?* Almost every disease was considered inflammatory; patients were bled to the verge of exsanguification; Drs. Sangrado rejoiced in the deadly paleness of their patients' features, and when the relatives complained of their interminable convalescence, they were quietly told, that it was in the nature of the Divine infliction, and not the result of a most pernicious treatment."

So far good; but one would scarce be prepared, after such a denunciation of Sangrado, to read as follows (page xxxiv):—

"Laying aside, however, its ultimate cause, we make a simple statement of facts, when we assert that inflammation is the keystone of pathology. . . . . We have been led to profess the self-same creed; and while asking pardon for the utterance of such a truism as that inflammation is the keystone of ovarian pathology, we no more pretend that it explains the whole of it, or even all the phenomena of diseases of menstruation, than we do that it is the *ratio sufficient* of tubercle or cancer."

Now we cannot grant the proposition *in cumulo*, though we have offered a sufficiently plausible reason above, on general principles, for a peculiar excess of inflammatory action in the parts referred; but it would be but a partial view of the pathology of the question, did we exclude the agency of sensibility, and the still more important influence of sympathy in the most remote parts of the animal frame. We must not drive our theory so hard and so exclusively lord paramount over all other possible conditions of diversity in the kinds of action going on in the animal economy, than either the healthy vital condition or inflammation. This is too narrow a view of pathology.

In the introductory chapters, grouped under the name of Prolegomenon, the author examines the exact meaning of the term ovarian inflammation, and endeavours to prove its frequent occurrence from the results of inflammatory action being often observed in the ovaries. He is disposed to claim a higher position in the function of reproduction for the ovaries than the uterus, holding the ovaria in the unimpregnated state the centre of the female sexual system. Subsequently, the various modes of ovarian exploration are brought forward, and detailed.

Inflammation of the ovary he considers either acute or sub-acute, each form of which he describes in full, commencing with the morbid anatomy of each variety, followed by the history of the causes predisposing, as also the exciting. The symptoms of the two varieties are then passed in review, with the diagnostic marks by which they are to be separated from diseases of the adjacent parts, or which affect an analogous train of symptoms. The different terminations of the sub-acute and acute forms of the inflammation are given at considerable length, and the first and second division of this section of his work, (Chapters V. and IX.,) contain a full detail of the treatment appropriate to each kind of malady.

In speaking of the causes of the sub-acute form, Dr. Tilt writes—

"Amongst the functional causes of sub-acute ovaritis, we have alluded to sexual intercourse. Let us consider its excess, or privation, or its intemperate exercise. The excessive use of this stimulus is not unfrequently a cause of sub-acute ovaritis in newly-married women, as the effect of the first impression of a novel stimulus, and its imprudent indulgence. But it is more especially the sequel of the culpable and inordinate exercise of intercourse, as seen in women in every respect unfortunate. Walter and Renauden state, as the result of their experience, that the ovaries of prostitutes are seldom without some morbid lesions, and Dr. Oldham has lately confirmed their assertion by describing those lesions, which are those of ovaritis. The privation of sexual intercourse is no doubt a cause of certain forms of sub-acute ovaritis, whether we consider its absolute privation in healthy women, whose feelings and passions are strong, or its sudden denial to those accustomed to its indulgence, as in young widows, whom Hildenbrand considers to be often attacked with this complaint, or, as in prostitutes, when placed in confinement. In such cases the cerebro-spinal sympathies are called into active play, and hysteria masks its local cause.

* * *

Sub-acute ovaritis is also one of the pathological elements of that state truly described as the critical time in the life of woman; and then, in most cases, it re-acts on the uterus so as to produce those sudden floodings which so often terminate menstruation. If this be not the case, the periodical congestion, which has lasted for so many years, does not at once subside: it still exists long after the menstrual flow has ceased; and as this ovarian congestion is not relieved by its accustomed discharge, the ovaries are liable to inflammation, if such a result be not carefully warded off by repeated purgatives and judicious bleeding, according to the practice of our medical forefathers—a practice, perhaps, too much neglected in our own days."

Our Author goes on further to observe:—

"If, as we are told, (Seymour on Disease of the Ovaria,) birds lay eggs under the influence of impressions calculated to promote certain feelings, without the congress of the male bird, may we not justly infer, that certain feelings of the mind are, in women, sufficient to stimulate the organs of ovulation? We see the influence of such modes of excitation on man; that they promote the secretion of the seminal fluids, and we may therefore infer, that they produce on woman an analogous effect."

Does Dr. Tilt really believe in this doctrine? it is a right gallant one, and forms a better physical argument for the falsely imputed frailties of fair nuns, than any theories of an obscure age.

By the way, in a Note, the Writer talks of Recamier being the first who planned *post-mortem* examinations in hospitals. Verily there is some mistake here. He forgets the *post-mortem* descriptions of Morgagni.

On the important proposal of removing mechanically the obstructions formed in the Fallopian tubes, the opinion of our Author is almost decided in the negative; and he very pertinently states the objection urged by Sir B. Brodie, as to the difficulty of distinguishing in what cases it is required. He subjoins further:—

"Admitting the possibility of the operation," (which has by no means been satisfactorily demonstrated even on the subject,) "if the mucus be thick, then the bougie will no more remove it than it removes the glutinous plug which so often obstructs the neck of the womb; besides, it could not modify the inflammatory condition of the lining membrane of the tubes, which causes them to secrete the glutinous substance, and thereby produce their temporary occlusion; whereas, if it were attempted to cauterize the oviducts, or inject them with different liquids, we consider the danger of the practice would far exceed the inconvenience of the infirmity it is intended to alleviate."—Pp. 145, 146.

In the chapter on the hysterical type of what is denominated by our Author sub-acute ovaritis, pages 91 to 100, and again 140, 141, we cannot see that the case is proven; even admitting that the hysteric passion does actually occasionally mask the obscure indications of primary ovarian derangement, we have so often witnessed this disease that we cannot refuse our assent to the common occurrence of pure hysteria in numerous cases, perhaps the majority, as a distinct nervous affection, depending, perhaps, primarily, on a venereal orgasm; but not certainly on the stimulus or irritation of inflammatory action, even though it be held as of the sub-acute form. Convulsive disorders arise more generally from irritation than inflammatory action; worms in the intestines are a frequent source of them in young people, and were we disposed to argue in a circle we might feel inclined to infer the non-existence of inflammation in any of the uterine organs during that affection; hysteria to wit, from its long duration and irregular occurrence; for though it may be more generally dreaded at the menstrual, the slightest mental emotion at other periods will as readily provoke the accession. If Dr. Watson errs in his estimate of the danger from hysteria,—for he says that "in 999 cases of hysteria out of 1,000 the disease is unattended by peril either to body or mind"—we agree to the general statement as more consonant with fact, than the opposite proposition which the sub-acute ovaritis theory naturally countenances. But we trangress our limits.

To conclude the brief summary of Dr. Tilt's Work:—If he is somewhat *ultra* in his views, the novelty of the subject may be admitted as an apology: and if he has exaggerated the character of the symptoms which he deems indicative of the peculiar pathological conditions he has been investigating, he does so evidently in all sincerity. Our space does not permit us to enter more fully into his labours. We have no doubt, however, that we

are destined to receive more ample light from his pen, as the accumulation of years supplies him with extended data to fill up the deficiencies and enlarge the views which he has in the work before us endeavoured to establish.

CORRESPONDENCE.

MEDICAL ETHICS.

[To the Editor of the Medical Times.]

Sir,—A practical illustration is often worth a host of verbal arguments. I offer the following, then, as a practical illustration of the propriety of, sometimes at least, continuing a friendly supervision of a patient even after a quack has been called in to see or prescribe for him.

I do not wish my name to be appended to this communication, but I enclose my card as warrant that it is authentic. Not many years since I was in attendance on a gentleman living on the banks of the Thames. He was suffering from pain, apparently neuralgic, in the vicinity of the sigmoid flexure of the colon. His nervous system was of so sensitive a character, that he *felt* (not *fancied*) as severe pain that which to another would have been little more than slight discomfort. As a rule, his general health was excellent; and I never knew him ill excepting from dyspepsia, diarrhœa, or slight dysentery; his heart—sounds, impulse, and extent of dulness; his lungs,—percussion-note, and auscultatory phenomena; the contents of his cranium and spinal canal—so far at least as could be learned from the exercise of their intellectual and motor functions—were all models of health. That he had no ailment of the cranial or thoracic organs, he was himself as satisfied as myself, for he had never suffered from a pain, or ill referrible to either. As the affection of the lower part of the abdomen continued for some time, he expressed a wish to have the opinion of a Madame—a noted clairvoyante—that from her he might learn the exact condition of his internal organs.

This gentleman I knew to be a believer in all the mysteries of mesmerism. Supposing I had declined to be present at the *séance*, what would have been the consequence? He would, having no reason to believe the woman a swindler,—an obtainer of money under false pretences,—he would, I say, have probably been her dupe. But I hold, in common with the writer of the very excellent Article in the last *Quarterly Medical Review*, that, under certain circumstances, it is for the patient's good, and the *honour* of our noble Profession, that we should continue friendly supervision of the sick man, although he has chosen to consult a notorious quack; and therefore I was present at the house of my friend when Madame, attended by her husband, came to examine the sick gentleman's inside,—a delicate situation, by the way, for a lady, to be in a room with two gentlemen, whose smallclothes were, to her eyes, as gossamer webs. I need not dwell on the beastliness of the husband who could place his wife in such a position for lucre. I will endeavour briefly to depict the *séance*. There were present, Mr. S.,—*i. e.*, the patient, his wife, Madame and her husband, and myself. I promised to give utterance to no scoffs, to utter no sound indicative of want of credence,—in fact, for the time, to act as a believer; for I was told, that any display of want of belief might disturb the mesmeric phenomena.

Madame was mesmerised by her husband, placed *en rapport* with Mr. S., and the following dialogue ensued. I had obtained permission from Mr. S. to conduct the inquiry.

Dr. M.: "Madame, Mr. S. is particularly anxious to be informed by you as to the state of some of his internal organs. May I ask if he has yet been rendered clear enough for you to see, by the passes of Monsieur."

Madame: "A few more passes." (They were made, and, at my request, directed especially over the region of the heart, to make that organ and all its component parts particularly clear.)

Dr. M.: "Now, Madame, will you be kind enough to explain to us the condition of the bag in which the heart lies?"

Madame: "It is all covered with slime."

Dr. M.: "Now, the heart itself."

Madame: "I do not see anything very particular."

Dr. M., addressing the husband: "Perhaps you, Monsieur, will make a few more passes over the seat of the heart, and especially over this part"—pointing to the situation of the aortic valves. (It was done.)

Dr. M.: "Now, Madame, what we are very anxious that you should tell us is, the condition of that opening which leads into the great vessel by the branches of which the blood is carried to every part of the body?" (I asked Madame if she thoroughly comprehended me? She assured me she did.) She directed her face to the region indicated, placed it nearer than before, and at last resumed the dialogue.

Madame: "Yes, there are some threads, very fine, like delicate silk, hanging from the little flaps which are always there."

Dr. M.: "Are these delicate threads two inches in length?"

Madame: "Oh, no; about so long:" indicating about an inch on one of her own fingers.

I thanked her, and asked if anything else ailed the heart? She said "No," and I then proceeded to the lungs.

Again I requested Monsieur to make the upper lobe of the right lung particularly clear.

Dr. M.: "Do you observe any solid substance in that portion of the right lung?"

(A pause.)

Madame: "Yes."

Dr. M.: "What size?"

Madame: "As large as an orange. It is soft in the middle; slimy stuff, all sticky, covers the lung."

The attention of Madame was next directed to the brain. She discovered an indented spot on about the centre of the surface of the right hemisphere of the cerebrum. The account of the spot was misty and confused.

Dr. M.: "Can you inform Mr. S. if there is any water on the outside of the brain?"

Numerous passes were made over the cranium by Monsieur.

Madame: "Yes, there is."

Dr. M.: (With some curiosity.) "Is there as much as a pint and half?"

Madame: "No; not so much."

Dr. M.: "A pint?"

Madame: "About four wine-glassesfull."

Pretty well this, "thought I to myself," but suppressed—lest I should disturb the mesmeric balance—all indications of incredulity.

A little conversation then ensued on the acidity or alkalinity of the blood. I explained to Madame, that everything that tasted like vinegar was acid. She said, it (the blood) was sour.

Dr. M.: "I am sure, Madame, Mr. S. ought to be much obliged for the trouble you have taken. Will you be kind enough to describe to him the state of his liver?"

Madame: "It is all covered with little lumps."

Dr. M.: "As large as filberts?"

Madame: "Yes."

Dr. M.: "Are they white, hard, and glistening on the inside?"

Madame: "Yes."

Dr. M.: "Puckered toward the centre?"

Madame: "All drawn up so." (Placing the tips of her fingers together.)

I now rose, and expressed to Madame my thanks. Nearly an hour had been occupied in the *séance*, during which I had been informed that Mr. S., a healthy man, was suffering from disease of the aortic valves, phthisis, hydrocephalus, carcinoma of the liver, and acidity of the blood. Let me ask the thinking reader, what would have been the result of Madame's visit, had I not been present. Inquiries would at once have been made as to the condition of the intestinal canal. Slime and ulcers of a character to alarm the patient would have been seen by Madame to any extent. As it was, by leading the lady to the heart and lungs—organs which Mr. S. knew to be sound, and leading her to declare, that diseases existed there which could be proved by the stethoscope not to be present—I fully satisfied him, that in his own case, at least, Madame's powers were all pretence. This woman was, at the time, and is still, for aught I know to the contrary, drawing large sums from the credulous public. One gentleman, I was informed, had a residence in her house for the purpose of being operated on daily, and prescribed for occasionally by the clairvoyante *en rapport*.

I have the honour to remain, Sir,
Yours obediently,
M.—, M.D.—.
Lic. Royal Col. of Phys.

P.S.—It must not be supposed that I consider this case to tell against mesmerism. All it proves is, that Madame was an impostor.

[We are sorry the writer has not appended his name. The card enclosed was that of a gentleman who, we are confident, would neither exaggerate nor set down aught in malice. We quite approve of our Correspondent's code of Ethics; and, in illustration of the correctness of his views, we cannot do better than call the attention of our readers to the cases related by Dr. Forbes in his "Illustrations of Modern Mesmerism." The celebrated clairvoyante, Madlle. Julie, who has recently established her oracle at the west end of the town, undertakes, upon receiving a lock of hair belonging to any patient, to pronounce a clear diagnosis of disease, whatever organ may happen to be affected. In one case she predicated that a girl who had a local affection of the mouth, but was, in other respects, "in the most perfect health," had disease of the heart, lungs, stomach, and kidneys, with general debility, fever, &c.; and in another, that a lock of hair which belonged to a man indicated disease of the uterus. This is what Dr. Forbes calls a "clincher;" but such cases suggest one piece of advice which we would urge upon all those who, whether from curiosity, or faith in these mesmeric mysteries, expose themselves to the pretended revelations of such seers,—it is, never to go unaccompanied by a Medical man, who may, by his superior knowledge, assure persons who are nervous of whatever may be the real state of the case. Upon the minds of unprofessional persons, such announcements as those of Madlle. Julie are calculated to have a very injurious effect.—Ed. *Med. Times.*]

THE LATE INQUEST AT UNIVERSITY COLLEGE.

[To the Editor of the Medical Times.]

Sir,—In consequence of the attack which has been made upon the students in Medicine of University College, I take the liberty of requesting the aid of your journal in making the facts of the affair known to the Medical Profession.

It must be at once evident, that it is of the greatest importance to Medical students, that they should have an opportunity of seeing and hearing the coroners' inquests, not only because Mr. Wakley, sen., long since maintained that Medical men were the only proper persons to be coroners, but also that they often have to appear as witnesses; and, if they are unacquainted with the mode of conducting inquests, their Professional knowledge, however great, becomes almost useless. Hence it is not remarkable, that the most diligent students have always been in the habit of attending the coroner's inquests held in the hospital; but, upon this occasion, the inducement to attend was the greater, since the case was interesting in a Medical point of view, as bearing upon a subject at present under discussion in the Profession.

Notwithstanding this, there were only four students present at the commencement of the inquest; but, after a short time, four or five others came in without making the slightest noise. Upon this the Deputy Coroner remarked, that it was impossible to hear anything in that room while persons were walking about with thick heavy boots. Now, the student against whom this was addressed happened to be remarkably quiet and gentlemanly in his behaviour, and wore very thin boots. He immediately replied, that his boots were not particularly thick, but nevertheless he left the room; whereupon Mr. Wakley, jun., ordered the door of the room to be locked; and, upon being told that there was no key, he, in a peremptory voice, ordered the door to be locked. The tone of this order, and the impossibility of its being obeyed, caused a slight but involuntary laugh from the students in the room. Mr. Wakley immediately ordered all strangers to leave the room. The students requested to know upon what grounds they were to be deprived of the advantage of hearing the evidence? when the reply from the Deputy-Coroner was, that he made it a closed court. The students denied his power of doing this, and refused to leave the room upon such grounds. Upon this Mr. Wakley said, as there were four (students) to one (summoning officer), the latter must call in three policemen. The students remained some time, but, upon reflection, they determined upon leaving rather than allow policemen to be brought into the room. The Physician's assistant having, at the same time, been ordered out of the room, he could not be found when the Medical evidence was required, and hence the reason of the adjournment to the evening.

In the evening the students of the class of Medical Jurisprudence, who were deeply interested in the case, attended the inquest; but no sooner had the jury assembled than Mr. Wakley requested all

strangers to leave the room, and, upon the students declining to do so, ordered a policeman to remove them, declaring that he (Mr. Wakley) was supreme there, and would have his own way."

You, doubtless, wish to know the foundation of the Deputy Coroner's objection to the students being present at the inquest. Mr. Wakley, jun., wishing to bear out the assertion, that he has received a partial Medical education, and is thereby fitted to fill the office of Coroner, takes every opportunity of showing his Medical knowledge; but this is of so inferior a kind, that the tyro just placed behind a chemist's counter would be ashamed of such as making a guess whether a bottle is a four or six-ounce one. Now, if Medical students attend the inquest, it is just possible they may not form the highest estimate of his knowledge; whereas, if the jurymen alone be present, he has no fear of being criticized. This has led constantly to Mr. Wakley, jun., objecting to Medical students being present at inquests; but upon this occasion it is whispered there is another reason for publicly abusing the students. I inclose my card; but to the Messrs. Wakley I am,

A WELL-WISHER TO MY ALMA MATER.

University College, June 5.

[The Writer inclosed his card, and we know him to be, *bond-fide*, a student of University College. He must pardon us, however, that we have omitted a few lines in his letter. The fact alluded to is well known and need not be repeated.—ED. *Medical Times.*]

THE "LANCET'S" BALLOTING PAPER.

[To the Editor of the Medical Times.]

SIR,—I beg, on behalf of the Institute of Medicine and Surgery, to decline the office of Scrutator of the ballotting papers issued in the last *Lancet*, and which I am publicly called upon to undertake in conjunction with three other gentlemen.

I am convinced that the mode adopted by the *Lancet*, to collect the sense of the General Practitioners respecting the formation of a College of their own, or of so opening the College of Surgeons that it may in reality become their College, will prove utterly abortive. I have had some correspondence with Mr. Bottomley on the subject, and I would willingly have assisted a Committee of gentlemen, properly appointed, in devising some plan likely to collect the real sentiments, not of the Profession at large, but of General Practitioners, whose question alone it is.

I object to the heading of these balloting papers, "House of Commons," as if they were official documents; I object to the advertisement at the end of them, with which the subject has nothing to do; I object to the manner in which the previous matter and the queries are drawn up; but I most of all object to the papers being chiefly, if not solely, issued to the readers of the *Lancet*, whose minds have been prejudiced for several years against the whole proceedings of the Institute, and against the incorporation into a Royal College of gentlemen engaged in general practice. I believe that the voting papers will only reach a section of the Profession; but even of these I should decidedly object to every vote given by Consulting Physicians and Surgeons, and by every Fellow of the College of Surgeons, especially the honorary Fellows, whose votes upon any such question may be said to be secured by their very election.

The question is not merely as to the opening up of the Council of the College of Surgeons to General Practitioners. As it stands by itself, that question might be answered in the affirmative by those who, from early association, or other circumstances, would wish to have an elderly institution, instead of a young one, for their Alma Mater, though her conduct to them has been worse than that of a cruel step-mother! No, it is the concomitant and relative circumstances that ought to decide this question;—the future position, government, education, and examination of General Practitioners—these are all at stake. Under the mere alteration of the Charter, they would be looked down upon as an inferior grade and treated accordingly; and, if three or four General Practitioners, or even a larger number, should obtain seats on the Council, or were thrust upon it by a new Act of Incorporation, they would be always caballed against, and eyed with jealousy and distrust, and would never be able usefully and truly to represent their constituents—the main body of the Profession. Then, as to future examinations. As the Councillors of the College of Surgeons confess themselves wholly incompetent to conduct a decent examination in Medicine, Midwifery, Pharmacy, or Chemistry, the proposed plan is, to turn over General Practitioners, for this purpose, to the College of Physicians! and we have lately seen the sort of examination that a General Practitioner may expect from that learned body! Woe be to the General Practitioners of this country, if they shall ever be placed under the Government and control of the two present Colleges; for the experience of the past half century shows, that they would be ruled with a rod of iron, and that, whenever they shall have achieved seats in the Council of the College of Surgeons, and examinations at the College of Physicians, they will have gained *lasting defeat and degradation*, and continue more a rope of sand than they are at present—without a local habitation or a name.

But suppose that a large number of country votes could, by any fair means, be obtained in favour of opening the College, we shall be no nearer our object than we now are, as the Council will resist every attempt to make it a College of General Practitioners, and no Government will compel it to become so. The scheme is, therefore, impracticable. But let us suppose, further, that this could be accomplished. Would this satisfy the General Practitioners, and especially those in London? I firmly believe it would not. They see that the Physicians, though few in number, have a College—that the Consulting Surgeons, though a still smaller body, have their College—and they properly and justly demand, and the public interests require, that they should have a College of their own, which would unite them together, and give them the control of the education and examination of their own members, with rights and privileges which would afford them a status among the scientific incorporations of this Metropolis.

Some gentlemen affect to consider, that a third College would be an inferior one, and degrade its members! Mr. Guthrie, the great opposer of such an Institution, has, with straightforward manliness, shown, in his Parliamentary evidence, that a Royal College of General Practitioners would be co-ordinate with the other two Colleges, and therefore would not be an inferior one, nor could it degrade its members! What has been the cause of all the late tergiversations and fierce opposition of the College of Surgeons to the incorporation of General Practitioners? Why, because they think, it would destroy, or greatly injure, their College. Though I by no means agree in this opinion, surely it is the best testimony that could be adduced against the senseless cry, that the new College would be an inferior one. Give but the General Practitioners such a bond of union, with a fair field, and the control of their own education, and I have no fear of their rapidly raising the scientific and other attainments of their order to at least a par with those of the existing Institutions. Hoping that they will never cease their demands till they have obtained a College of their own,

I remain, Sir, your obedient servant,

Dulwich, June 12, 1850. GEORGE WEBSTER.

CONVENTION OF POOR-LAW MEDICAL OFFICERS.

[To the Editor of the Medical Times.]

SIR,—With the desire to bring more prominently before the public the present faulty system of Poor-law Medical Relief, the Committee of Poor-law Medical Officers have inserted an advertisement on the subject in the Daily and Weekly Journals. I subjoin a copy of the same, which appeared in the *Times* and several other non-medical Journals. As a matter of intelligence for the Profession, it would be interesting; and even useful to the movement the Committee are engaged in, if you would bring the same before the notice of your readers.

"THE POOR-LAW BOARD.

THE SICK POOR, THEIR MEDICAL ATTENDANTS, AND THE RATE-PAYERS.

"In England and Wales, a staff comprising more than 3000 professional gentlemen, acting under the Poor-law Board, administers relief during penury, disease, and suffering, to nearly 3,000,000 of human beings.

"The demands made upon the time, skill, and health of these Medical Officers, who are often called, singlehanded, to succour nature under the most appalling calamities to which humanity is subject, are urgent, frequent, perilous.

"This class of gentlemen are nominally requited from a fund annually raised for the poor, amounting to nearly eight millions sterling. Called into active service by the humanity and wisdom of the nation, they have been considered as paid by 197,953*l.*, averaging per case, as shown by above 800 promiscuous returns, in country districts 2*s.* 7*d.*, and 1*s.* 6¾*d.* for metropolitan districts, being less than half the cost of drugs alone in hospitals. One half of this amount is paid by the parishes, the other out of the Consolidated Fund.

"Impelled by a sense of renewed and continued oppression and misrule, injurious to themselves and also to the sick poor and to the rate-payers, the Poor-law medical officers have often laboured for the reform of the vicious system.

"Convinced of the existence of these evils opposed to justice, humanity, and science, Lord Ashley (aided by the indefatigable exertions of Mr. Guthrie, then President of the College of Surgeons) obtained a parliamentary inquiry through a Select Committee in 1844. Strong and conclusive as was the evidence then obtained, little, if any, amelioration ensued; no enactment passed the Legislature to correct the abuses thus made manifest. Multiplied aggressions and miseries, needlessly incurred through false economy, found another organ by which to give utterance to their plaints in the Convention which was established in October, 1847, over the first annual meeting of which Lord Ashley presided.

"Petitions to Parliament from various classes of society have been numerous and frequent. Deputations have waited on the Home Secretary of State, and again and again on the Poor-law Board. These deputations have been received with official politeness, and with assurances of sympathy and promises of consideration.

"More recently, orders have emanated from the Poor-law Board urging curtailment of expenditure, sanctioning deviations from their consolidated order, and suggesting a further reduction of salaries to medical officers, even bringing them down in one metropolitan union to about 8*d.* per case. Such appreciation of the services of professional men, who are expected to be gentlemen of education, ill becomes a Board, one of whose secretaries, Lord Ebrington, receives a salary of 1,500*l.* per annum, for doing that which occupies but a moderate portion of his time, reserved from parliamentary and other duties.

"The Poor-law Union surgeons make this appeal to the public, and to the press more especially, satisfied that such a system cannot long be maintained when fully brought under public notice and exposed to general condemnation.

"By order of the Committee,

"THOMAS HODGKIN, M.D., Chairman.

"CHAS. F. J. LORD, Honorary Secretary.

"4, Hanover-square, May 14, 1850."

The Committee have addressed a short special note to each Member of Parliament, with a copy of the above. It is however to be feared, that amid the press of their other official duties, the cause may fail to obtain the adequate attention of Members, and, consequently, lose their aid, unless they can be moved individually through the influence of personal friends. The Committee, of course, cannot do this, but our highly respected Chairman, Dr. Hodgkin, has very judiciously suggested, that, as every Member of Parliament, or some branch of his family or connexions, must be professionally attended by, and more or less familiar with, some medical man, it is evident that our brethren throughout the country might exert an influence sufficient to effect an amelioration in the present system of Poor-law medical relief.

Hoping to produce this co-operation among our own body, to bring exertions to a focus, to illustrate that "unity is strength," I beg the favour of your publishing this letter, embodying a copy of the address recently given as an "advertisement" to the public.

I have the honour to be, Sir,

Your most obedient servant,

CHARLES F. J. LORD, Honorary Secretary.

4, Hanover-square, June 7, 1850.

HEALTH OF LONDON DURING THE WEEK, ENDING JUNE 8.

In the week ending last Saturday, the deaths registered in the Metropolitan districts were 844; in the previous week they were only 736. In the three corresponding weeks of 1847-9, the deaths ranged from 786 to 971; and, taking the corresponding weeks of ten years, the average is 861, or, raised in the ratio of population, 939. The present return, therefore, shows a decrease on the average equal to 95. With the increasing warmth of the weather, the mortality from diseases of the respiratory organs steadily declines. Excluding consumption, the deaths in this class, in the last four weeks, have been successively 145, 138, 105, and 94. In the same weeks the deaths from consumption have been 124,

125, 103, and 141, showing a sudden increase in the last, and an approach to the corrected average, which is 157. In the zymotic or epidemic class of diseases, 172 fatal cases are enumerated, having been in the previous week only 130, and the average being 201. Small-pox carried off 9 persons, scarlatina 19, and hooping-cough 25, the three epidemics still showing a decrease on the average. Measles, however, which destroyed 26 children, an amount differing little from the average, has suddenly increased on the previous week, when there were only 12 deaths. Typhus also exhibits an increase, for while there were only 26 deaths in the former week, there were 39 in the last, which, however, is not more than usual at this period. Diarrhœa and dysentery appear to become rather more prevalent; in the last three weeks they have numbered 13, 19, and 22. On the 3rd June, the wife of an engineer, aged 61 years, died at 21, Chatham-place, Lock's-fields, St. Mary, Newington, of "vomiting and purging (12 days), exhaustion." On the 5th June, at 51, Turnmill-street, Clerkenwell, the daughter of a labourer, aged 13 months, died of "cholera biliosa (12 hours);" and on the 31st May, at 38, Aske-street, Hoxton Old-Town, the daughter of an engraver, aged 1 year, died of "English cholera (2 days.)" A man, of 36 years, who is described as having been habitually intemperate, died of "delirium tremens, apoplexy;" another fatal case of intemperance is also recorded. Three children were suffocated in bed. It appears from the classification of deaths in public Institutions, that 98 occurred in workhouses, 59 in hospitals (of which 8 were in military and naval establishments) and 7 in lunatic asylums.

The mean reading of the barometer in the week was 29·878; the daily mean was above 30 in. on the first three days of the week. The mean temperature was 59° 3′; it was above the average of the same week in 7 years on the first four days, and below it during the rest; the highest in the sun was about 104° on Monday, Tuesday, and Wednesday.

The deaths in the several hospitals of London occurred as follow:—

GENERAL.		Sussex & Brandenburgh-house (Fulham)	0
St. George	8	Northumberland-house	0
Westminster	2	Whitmore House	0
Grey Coat Hospital	0	Pembroke House	0
Charing-cross	2	St. Luke	0
Middlesex	3	Miles'	0
University College	6	Warburton's	2
Royal Free Hospital	2	Lunatic Asylum, Bow	1
King's College	3	Bethlem	0
St. Luke, City-road	0	Lunatic Asylum, Brixton	0
St. Bartholomew	7	Retreat, Clapham	0
London	3	York House, Battersea	0
Guy's	8	New County, Wandsworth	2
St. Thomas	3	Peckham House	1
Bethlem, London-road	0	Camberwell House	0
FOR CONVICTS.		LYING-IN.	
Hospital Ship, Unité	0	Queen Charlotte's	0
Penitentiary Hospital, Millbank	0	British	0
MILITARY AND NAVAL.		City of London	2
Royal Hospital, Chelsea (South)	0	Hospital, York road, Waterloo 2nd part	0
Royal Hospital, Greenwich (East)	4	FOR PARTICULAR CLASSES.	
Royal Military Asylum	1	Female Servant Invalid Asy., Stoke Newington	0
Coldstream Guards Hos.	1	German Hospital	0
Grenadier Guards' Hospital	0	French Hospital	0
Scots Fusilier Guards	0	Portuguese Jews' Hospital	0
Royal Ordnance	0	German Jews' Hospital	0
Dreadnought Ship	2	FOR SPECIAL DISEASES.	
LUNATIC.		Small Pox	0
Kensington House	0	Fever Hospital	0
Munster-house (Fulham)	0	Lock	0
Normand-house (Fulham)	0	Consumption, Brompton	2
Otto-house (Fulham)	0	Opthalmic, Charing Cross	0
Blacklands-house	0		

TOTAL, 66.

The following is the number of Deaths occurring from some of the more important special causes:—

Apoplexy	25	Heart	33	Phthisis	141
Bronchitis	35	Hooping-cough	25	Pneumonia	45
Cholera	2	Hydrocephalus	28	Scarlatina	19
Childbirth	10	Influenza	1	Small-pox	9
Convulsions	30	Liver	11	Stomach	6
Diarrhœa	19	Lungs	6	Teething	10
Dropsy	7	Measles	26	Typhus	39
Erysipelas	10	Paralysis	22	Uterus	5

BIRTHS AND DEATHS.

	Births.	Deaths.	Births over Deaths.
Males	720	420	300
Females	633	424	214
Total	1353	824	514

MORTALITY TABLE.

Deaths in the Week ending Saturday, June 8, 1850.
(Metropolis.)

CAUSES OF DEATH.	Total.	Average of Ten Weeks.
ALL CAUSES	844	861
SPECIFIED CAUSES	837	855
Zymotic (or Epidemic, Endemic, and Contagious) Diseases	172	184
SPORADIC DISEASES:		
Dropsy, Cancer and other Diseases of uncertain or variable seat	26	50
Tubercular Diseases	184	189
Diseases of the Brain, Spinal Marrow, Nerves, and Senses	116	108
Diseases of the Heart and Blood-vessels	36	23
Diseases of the Lungs, and of the other Organs of Respiration	94	96
Diseases of the Stomach, Liver, and other Organs of Digestion	59	55
Diseases of the Kidneys, &c.	4	9
Childbirth, Diseases of the Uterus, &c.	13	8
Rheumatism, Diseases of the Bones, Joints &c.	6	8
Diseases of the Skin, Cellular Tissue, &c.	2	1
Malformations	5	3
Premature Birth and Debility	23	19
Atrophy	23	13
Age	32	49
Sudden	10	11
Violence, Privation, Cold, and Intemperance	28	27
Causes not Specified	2	6

METEOROLOGY OF THE WEEK.

Day.	Mean of Barometer.	Ditto. Dew Point.	Difference between the Mean Temperature of the day and the same day on an average of 7 years.	General Direction of Wind. A.M.	General Direction of Wind. P.M.	Amount of Horizontal Movement of the Air.	Rain in Inches.	Electricity.*
Sunday	30·245	47·4	+ 0·2	E.	E.	70	0·00	Positive, and tension strong at each examination.
Monday	30·198	45·2	+ 1·4	E.	E.	45	0·00	Positive, and tension strong throughout the day.
Tuesday	30·042	49·0	+ 2·3	E.	E.	45	0·00	P. and tension strong morning and afternoon. In the evening nothing was shown.
Wednesday	29·776	53·0	+ 4·4	E.	S.W.	115	0·00	Positive, and tension moderate at noon.
Thursday	29·500	54·5	− 4·4	W.	S.S.W.	195	0·02	Nothing was shown throughout the day.
Friday	29·551	57·3	− 1·4	S.W.	S.W.	175	0·03	Nothing was shown throughout the day.
Saturday	29·836	57·4	− 1·2	S.W.	N.W. & W.	105	0·03	P. and N., with moderate tension was shown between 11 a.m. and noon.
Means	29·878	59·3	+ 0·2	E. and S.W.		SUM 750	SUM 0·08	

*In this Column, A. stands for Active; N. for Negative; and P. for Positive.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at the meeting of the Court of Examiners on the 7th instant:—Messrs. Essex Bowen, Nevern, Pembrokeshire; William Bennet Dalby, R.N.; Horatio Folliott Nelson, London; John Smith, Northampton-square; Frederick Foster Andrews, King's Lynn, Norfolk, Richard Gregory, Dublin; Richard Burt, Dorchester; George Moore, Enniskillen; Daniel M'Keogh, Nenagh, county of Tipperary; Charles George Wolfenden, Dublin; and Samuel Winn Broadbent, Newcastle-upon-Tyne.

APOTHECARIES' HALL.—Names of gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, 6th June, 1850:—Francis Philip Cupiss, Diss, Norfolk; Charles William Morris, Cheltenham; Henry Forester, Bideford, Devon; Joseph Hutchinson Hammond, Bridlington Quay, York; Joseph Briggs, Ashbourn, Derbyshire; Hugh George, Chepstow, Monmouthshire.

MILITARY APPOINTMENTS.—23rd Foot, Staff-Assistant-Surgeon W. Campbell Seaman, M.D., to be Assistant-Surgeon, vice Grantham, deceased. Hospital Staff: Acting-Assistant-Surgeon, John Gibbons, to be Assistant-Surgeon to the Forces, vice Seaman, appointed to the 23rd Foot.

NAVAL APPOINTMENTS.—Assist.-Surgeon George Mason, M.D., (1849,) to the Albion, 90, at Devonport. Surgeon Alexander Wilson, M.D., (1849,) to the Sealark, commissioned at Portsmouth.

OBITUARY.—Lately, at Brighton, aged 87, Dr. Bardsley, of Manchester. He was well and most favourably known to the Profession by his writings. Lately, at sea, on his return from Texas, Dr. Corda, of Prague; he was a talented botanist. On the 5th inst., at Croom's-hill, Greenwich, Frederick Finch, Esq., M.R.C.S., aged 62.

ROYAL COLLEGE OF SURGEONS.—The election of Fellows into the Council of this Institution, will take place early in the ensuing month, when all the Fellows will, as usual, be invited to attend, to elect from amongst their own body, fit and proper persons to seats in the Council. There will be three vacancies declared, by the retirement in rotation of two, and the death of one,—the former, however, are eligible for re-election. At the request of numerous Correspondents, we subjoin from the Chronological List the first twenty gentlemen after Mr. Bishop, the last elected member of the Council.

Perry, John George, Westbourne-street, Hyde Park Gardens; Inspector of Prisons.

Simpson, George, Bedford-street, Bedford Square; Author of Anatomy, as applicable to the Fine Arts.

Mackmurdo, Gilbert, Wakefield, New Broad-street; Surgeon to St. Thomas's Hospital, and Royal Ophthalmic.

Kiernan, Francis, F.R.S., Manchester-street, Manchester-square, Member of the Senate and Examiner in Anatomy at the University of London; author of the elaborate "Anatomical Researches into the Structure of the Liver."

Heath, Henry, Newcastle-upon-Tyne.

Russell, Henry, York; Senior Surgeon to the County and Ophthalmic Hospitals.

Harrison, John, Bristol; Surgeon to the Infirmary.

Green, Thomas, Bristol; Surgeon to the Infirmary.

Hey, Richard, York; Surgeon to the County Hospital.

Gulliver, George, F.R.S.; Surgeon in the Royal Regiment of Horse Guards (Blues). The talented Translator of, and Author, with valuable Notes and Appendix, of Gerber's Anatomy; Introduction and Notes to Hewson's Works, &c.

Tuson, Edward William, F.R.S., Harley-street, Cavendish-square; Author of "Myology," "Anatomy of Inguinal and Femoral Hernia," "Dissector's Guide," &c.

Clark, Henry, Bristol; Surgeon to, and Lecturer on Surgery in the Infirmary.

Owen, Richard, F.R.S.; Royal College of Surgeons, having devoted his life to the science of the Profession, by profound study of its collateral branches, and by his numerous and valuable contributions deservedly obtained an European reputation, is in every sense most eligible for a seat in the Council.

Coulson, William, Frederick's-place, Old Jewry; Surgeon to the Magdalen, Lying-in, and Royal Sea Bathing Hospitals, author of "Deformities of the Chest and Spine," "Diseases of the Bladder and Prostate Gland," editor and translator of "Blumenbach's Comparative Anatomy," and "Edward's Manual of Comparative Anatomy," &c.

Jordan, Joseph, Manchester; Surgeon to the Royal Infirmary and Lock Hospitals, and Lecturer on Surgery.

Overend, Wilson, Sheffield; Surgeon to the General Infirmary.

Dalrymple, John, Grosvenor-street; Surgeon to the Royal Ophthalmic Hospital, author of "the Anatomy

of the Eye, and the Pathology of the Eye," the most valuable work on the subject published in England.

Gregory, Samuel, Sheffield; Surgeon to the Public and Eye Dispensaries and Lecturer on Anatomy.

Middlemore, Richard, Birmingham; Professor of Ophthalmic Surgery, Queen's College; obtained the Jacksonian Prize in 1835, for his Treatise on Diseases of the Eye.

Partridge, Richard, F.R.S.; Surgeon to King's College Hospital.

MIDDLESEX HOSPITAL.—The prizes at the Medical School connected with this Hospital, were distributed on the 7th instant. Medicine—prize, Mr. Wright; certificates, Mr. Bridgeman, Mr. Davies. Surgery—prize, Mr. Wright; certificates, Mr. Davies, Mr. Paske. Physiology — 1st. prize, Mr. Rean; 2nd prize, Mr. Paske; certificates, Mr. Denton, Mr. Balding, Mr. Ellery. Anatomy — prize, Mr. Paske; certificates, Mr. Spicer, Mr. Ellery, Mr. Lucas. Practical Anatomy—prize, Mr. Spicer; certificates, Mr. Lucas, Mr. Ellery, Mr. Dale. Chemistry — prize, Mr. Rean; certificates, Mr. Austen, Mr. Young, Mr. Moore, Mr. Grant. Forensic Medicine—prize, Mr. Bridgeman; certificate, Mr. Paske. Botany—prize, Mr. Biddle; certificate, Mr. Grant. Medicine clinical prize, Mr. Hulme. Surgery clinical prize, Mr. Sibley. Mr. Smith's prize, Mr. Wright. The Nepaulese Ambassador was present at the distribution. The annual dinner was held afterwards; the Report, which was read, alluded to the improvements made in the arrangements of the Institution, comprising a thorough system of ventilation, a laundry-room for superior nurses, fire-proof staircases, &c. For this purpose a large outlay had been incurred, the payment of which has so diminished the hospital funds, that an additional income of 550*l.* a year is required to raise them to the amount previously received. The hospital has, at present, 285 beds instead of 230, the former amount. The subscriptions at the dinner amounted to 1700*l.*

BROMPTON HOSPITAL FOR CONSUMPTION.—The eighth anniversary festival of this valuable charity took place on Wednesday evening at the Albion Tavern, and was presided over by Lord Feversham, supported by Lord Saye and Sele, the Rev. Robert Montgomery, and many other gentlemen who take a warm and active interest in the success of the institution. About 100 guests sat down to dinner, and it was expected that before the proceedings had closed the company would be honoured by a visit from the Nepaulese Ambassador and his suite. Accordingly a small table, tastefully decked with fruits and flowers, was prepared for the reception of the distinguished strangers. Late in the evening, however, one of the Ambassador's suite arrived, bearing a message from His Excellency, expressive of his regret that, from indisposition, he was unable to attend. The stranger was received with every mark of respect, and, having taken his seat on the right hand of the chair, remained for some time a spectator of the proceedings. From the Report which was read by the Secretary, it appeared that during the past year 360 in-patients have been received within the walls of the hospital, being an increase of 78 over the number admitted in the preceding year. Of this number 217 were relieved and discharged more or less benefited, 62 died, and there were 81 still remaining in the house when the Report was drawn up. Since the opening of the new building, in 1846, 1,036 in-patients had been admitted, of whom 760 were relieved and discharged, and 195 died. The number of out-patients treated during the past year has been 3,176, being an increase of 371 over the number treated in the previous year. The Report points out, that many of these patients continue under treatment for months, and that during the year the number of prescriptions to out-patients alone has amounted to 26,956. When to these facts, illustrative of the good which the charity has effected, it is added, that no less than 141 patients are now waiting their turn for admission, and that during the year the number so situated has averaged 47 males and 62 females, some idea may be formed of the strength of the hospital's claims upon public benevolence, and of the excellence of the cause in favour of which the Chairman of the evening had to make an appeal to the company. Lord Feversham was not unsuccessful in his advocacy, for during the proceedings the Secretary announced several long lists of subscriptions, amounting altogether to the sum of 1,500*l.* Among the other subjects brought before the guests last night was a very interesting Report by the Physicians of the Hospital, presenting the results of their experiences in the treatment of that fatal class of diseases with which they have to deal. This Report would seem to indicate that science has made considerable progress in the treatment of phthisis. The facts set forth in it have evidently been collected with great care, and present such striking results as to have attracted much attention in the Medical Profession. With respect to the arrangements of the festival, they were in every respect satisfactory. The dinner was excellent, and the vocalists, among whom were Miss Ransford and Mr. Leffler, exerted themselves to the utmost to please. Mr. Toole was toast-master.

THE ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Henry Hancock, Esq., Surgeon of the Charing Cross Hospital, has just been elected surgeon to this valuable Institution.

ASSISTANT-SURGEONS IN THE NAVY.—In the House of Lords the other night, Lord Minto stated that a new arrangement had been made in the Navy, whereby a double cabin was allotted to this class of officers, in order to enable them to pursue their studies; but in many ships he was sorry to say that the Assistant-Surgeons had declined to avail themselves of it, and in others it had been converted into a store-room. He believed that a portion of the "sick-bay" was now to be appropriated to their use, thus interfering with the comfort and well-doing of the sick, rather than find accommodation for the Assistant-Surgeons in another part of the vessel.

A NEW FORM OF HYSTERIA.—Dr. Marshall Hall describes, in the *Lancet*, a new form of hysteria, connected with and caused by the abuse of the speculum. In his preliminary remarks, alluding to the manner in which the charge of indecency was received by one of the speakers at the late meeting of the Medical and Chirurgical Society, on the ground of the non-necessity of the exposure of the person, he says, "but if there be no exposure of the person, is there, at first, no wounding of the feeling, and is there afterwards no deterioration and blunting of those feelings, by the repeated daily or weekly use of the speculum vaginæ in the virgin, and in the very young even amongst the married?" He declares that there is such deterioration, and that the female who has been subjected to such treatment is not the same person in delicacy and purity she was before. Dr. Marshall Hall's declaration on this point is fully confirmed by the results of experience. The consequences of the abuse of this practice are indeed lamentable. Dr. Hall says he has known cases of the most revolting attachment on the part of the patients to the practice and the practitioner. The current of the ideas becomes hypochondriacally directed to the organs of generation. The very mind is poisoned. A new and lamentable form of hysteria is induced. The patients become reserved, and moody, and perverse, and speak unintelligibly in broken sentences; the peace and happiness of the family are broken up; subjects are discussed on the domestic hearth which ought never to be mentioned except in the sick room, words which wound are spoken, and thoughts which are derogatory are expressed by other, perhaps by the male, members of the family. Dr. Hall mentions cases in which the speculum has been repeatedly employed, and had induced this sad, wretched state, and yet no uterine disease existed. He believes the cases in which the young, and especially the unmarried, are afflicted so as really to justify the use of the speculum, to be rare, and the cases in which the injection of a solution of nitrate of silver by the patient herself may not take the place of the application of this valuable remedy in substance by the hand of the practitioner, to be rare indeed. We heartily thank Dr. Marshall Hall for this additional blow at the "pollution." It is greatly to his credit.

MR. NEWDEGATE has obtained leave of the House of Commons to bring in a Bill to provide medical assistance in case of accidents on railways. This we presume he has been prompted to do on account of the extraordinary decision in the case that occurred lately between Mr. Sands Cox and the Directors of a certain railway. We shall look to its provisions, and see that the interests of the Profession are properly protected.

THE ROYAL SOCIETY.—The following members of our Profession have recently been elected Fellows of this Society:—Mr. George Busk, Mr. T. B. Curling, Dr. Day, Dr. Graves, Dr. Handfield Jones, and Mr. Tomes.

A FEMALE MEDICAL COLLEGE.—A College for the medical education of females at Philadelphia has received a charter from the state of Pennsylvania. It is said that Dr. Elizabeth Blackwell will be a candidate for the Chair of Surgery. She obtained her degree at Geneva College, U.S., and subsequently studied at Paris.

GAY-LUSSAC.—The President of the French Republic has ordered a bronze statue to be erected in memory of Gay-Lussac.

DR. PARIS.—The authorities at the University of Oxford purpose conferring the honorary degree of LL.D. on Dr. Paris, the President of the London College of Physicians.

THE COLLEGE STUDENTSHIPS.—At the meeting of the Council of the Royal College of Surgeons yesterday, Mr. David H. Monckton was elected a Student in Human and Comparative Anatomy, in the vacancy occasioned by the resignation of Dr. J. T. Arlidge, a candidate for the appointment of Resident Medical Officer to the St. Luke's Lunatic Asylum.

TO CORRESPONDENTS.

Errata.—The want of a Medical Directory for Scotland has led us into error. In our List of Contributors we did not quite accurately designate two distinguished gentlemen:—Mr. Lizars should have been described as late Professor of Surgery in the Royal College of Surgeons; and Dr. Gairdner, as Fellow of the Royal College of Physicians, and Pathologist to the Infirmary of Edinburgh.

"M. M."—In some hospitals the sulphuret of lime, properly diluted, is used to remove the hair. It is very successful, but exceedingly offensive.

"Phthisis in Jews."—It has been said that Jews are not subject to consumption and scrofula. Will our readers kindly favour us with any statistics upon this point.

"L. M., a Constant Reader."—We are not aware than any appointments have been made in the proposed New South Wales University. Our Correspondent had better apply to the Colonial Secretary.

We have received "Obadiah Pokitup's" letter. Such notices of "how to get into practice" are very likely to keep their possessor out of it. And in answer to his inquiry, whether such a person would be assuming the character of the quack, were he to write a book, we can only answer,—that *any* character might be useful, provided it were not his own.

"M. D., Leeds."—"Half-caste" is generally applied in India to the offspring of a Hindoo and European—now understood in a more general sense. Tschudi gives, as well as we recollect, some twenty different varieties of half-castes. The term "mestizo," is applied to the children of a white father and Indian mother. Mulatto, white father and negro mother.

"H. B., Cork."—The Irish Medical Charities Bill, we believe, is, at present, like Mahomet's coffin—between the heaven of the House of Lords and the somewhat dull earth of the Commons. We cannot say anything about the Inspectorships; but we have heard there is something about a hundred applicants.

"N."—Mr. Monckton was, we believe, appointed yesterday to the studentship of the College of Surgeons.

"Our Friend at Odiham" is assured it is with deep regret we learn that a member of the Profession should have acted in the manner described. In the unfortunate state in which our Profession is at present found, we think it is better to conceal certain of the faults and failings of our brethren, however glaring they may be, than publish them to the world.

"A Six Years' Subscriber at Liverpool" will observe our opinions upon the subject of his communication.

"Mr. H., Bath."—The climate of Montpellier is perhaps not the best in France for phthisical subjects. It is dry, hot, and irritating, and generally considered injurious in pulmonary diseases.

"X. Y. Z."—The most exquisite injections of the kidney and lungs may be seen in the College of Surgeons,—exhibiting the intimate structure of those organs.

"John Scott, Glasgow,"—"Sibbens" is an infectious disease common in the North of Scotland; it is generally considered as something between common itch and syphilis: in the Celtic tongue, the word, we believe, means "raspberry," to which the fungoid appearance of the sores bear a strong resemblance. In the Orkneys, also, Jameson says it is a common disease. The scientific name of the disease is *Frambœsia Scotica*.

"Libertas Altera."—We will pay attention to the fact indicated by our Correspondent; but he must not be too hard if his assistant be really as youthful as he supposes.

"Speculum."—In examination of the os uteri after death, care must be taken not to confound injuries inflicted by the instruments for abrasions existing during life.

"Anti-Speculum."—We recommend our Correspondent to bear in mind the fact, that redness, unquestionably inflammatory, sometimes disappears after death—erysipelas, for example.

"Juvenis."—Yes; the City Corporation of the sixteenth century did petition against the introduction of Newcastle coals, as injurious to the public health, in consequence of the stench they produced in burning.

"Young Microscopist."—Our correspondent must have patience, strong sunlight is most unfit for his purpose. The best light for the highest powers is that reflected from a white cloud opposite the sun.

"A Young Chemist."—Graham's *Elements*.

"Botanicus."—Reference to any of the well-known works on Botany would have informed Botanicus that the stamens in Rosaceæ are perigynous.

The Correspondent who tells us he wishes to pass a season quietly on the Continent, and asks our advice where he can best study medicine, is strongly recommended to Zurich. The Hospital contains upwards of 200 beds, and is under the direction of the well-known Professor Hassé, who speaks English very fluently, and is an admirable teacher.

ORIGINAL LECTURES.

LECTURES
ON
OPERATIVE OPHTHALMIC SURGERY.
DELIVERED AT THE CENTRAL LONDON OPHTHALMIC HOSPITAL.

By H. HAYNES WALTON, Esq., F.R.C.S.,
Surgeon to the Hospital, and to the St. Pancras Royal General Dispensary.

LECTURE XI.

ARTIFICIAL PUPIL.

(Continued from page 332.)

Closure of the Pupil with the existence of Cataract.—Closure of the Pupil with Opacity of the Cornea.—Partial Opacity of the Cornea sufficient to obstruct the Light, the Pupil free.—Prolapsus of the Iris, or Adhesion of the Iris to the Cornea; the Pupil destroyed or diminished; and the Cornea more or less opaque; the Lens and its Capsule transparent or opaque.—Conclusion of the subject.

Closure of the Pupil, with the Existence of Cataract.—I have so little to say under this head, that it need scarcely have been introduced, except for the sake of arrangement.

The cataract must first be removed by drilling, of which I have already given a sufficiently full description in the first part of this course; and the artificial pupil must then be made according to the principles discussed in my last lecture. This great improvement in treatment was introduced by Mr. Tyrrell; till his time the practice was to make the pupil, and to operate on the cataract at the same time, by extracting, or displacing, or dividing it into pieces. But now, instead of uncertainty of execution, arising from the complexity of the proceeding, with very frequent failure, there is great simplicity in operating, combined with something like certainty of success.

You will remember I told you that, by drilling, an aperture may occasionally be made with the needle in the capsule, or in the lymph that closes the pupil, or that either may be partially separated from the pupillary margin, and the pupil I partially cleaved, but that there were few cases that would not be improved by artificial pupil. I revert to this to enable me to state my opinion with more force, which is, that except when with closed pupil there is cataract, and we are obliged to resort to "drilling," and must penetrate and divide, to a greater or less extent, whatever substance blocks up the pupil, it is better not to attempt to clear the pupil, but at once to cut the iris and to make an artificial one.

Closure of the Pupil, with Opacity of the Cornea.—An extensive opacity of the cornea will render useless a central pupil, and oblige us to make one laterally. As a rule, that portion of the cornea which is to correspond to the new pupil should be left untouched, lest by inflammation it should lose its transparency. The necessary incision should be made at some other spot, which for the most part will be opaque. The most generally applicable operation is "separation," or detachment of the iris from its ciliary connexion; but it is an operation of much violence, and of such uncertain result that it should never be attempted except from necessity; for instance, when there is but a small margin of transparent cornea, or when the pupil must be made at the upper or the inner parts of the eye, but especially the inner, because of the difficulty, often insurmountable difficulty, of using instruments for the making of any other description of pupil. When it is possible, the operation by incision and strangulation should be chosen, care being taken that the cornea is opened very close to its margin.

For "separation," the cornea should be divided opposite the portion of iris to be detached, and so far only from its margin, that when enough iris has been separated, it shall easily reach the incision, to allow of a portion being cut off or strangulated, either of which should be done, if possible. For this purpose a sharp hook is necessary, the shape of which is generally determined by the fancy of the operator. It should be carried to the circumference of the iris, where it must be implanted, and the separation effected.

Instead of the iris yielding, as you desire, a mere strip of it may give way, or, what is more common, the hook may tear out without effecting any separation. I have lately used the capsule forceps twice for tearing away the iris when disorganization has rendered the hook inapplicable. In the first case it answered admirably; in the second, from certain peculiarities, the straightness of the instrument prevented its proper application. I have ordered a pair of a modified form, that shall be generally suited for separation. Any sort of forceps that can be effectually applied must be greatly superior to a hook, which is so uncertain in its effect. Whatever may be the instrument used, the iris should be seized as close as it is possible to its circumference. Cases requiring separation are as unfavourable for operation as for successful issue: they are usually the wrecks of disease, and do not admit of much repair. They may be said to fall only just within the compass of operative surgery. The cornea, besides being structurally changed, and cloudy in its most transparent part, has probably lost some of its substance by ulceration or sloughing, and is frequently staphylomatous, and prolapse or adhesion of a diseased iris to it has diminished or almost destroyed the anterior chamber, whereby the difficulty of operating is increased.

Certain conditions of the cornea, either alone or from their effect on the iris, create a necessity for artificial pupil.

Partial Opacity of the Cornea sufficient to obstruct the Light, the Pupil being free.—Before deciding on operating, the pupil should be fully dilated, to ascertain what improvement may be gained by it. Recently a patient was sent to me whose case had caused some hesitation in deciding on the propriety of an operation. There had been gonorrhœal ophthalmia; one eye was collapsed; the upper two-thirds of the cornea of the other was opaque. Without the aid of belladonna, he could scarcely distinguish objects; but with its use, he could see sufficiently to walk alone in the streets. According to the rule I have laid down in a former lecture, I decided not to operate.

Not many years ago, when an operation was needed in cases included under this head, lateral excision was the only one practised. The cornea was opened for the iris to protrude, that a bit of it should be snipped off; and if it did not protrude, it was pressed out, or pulled out by hook or forceps. The danger of dislocating the lens, or of wounding or injuring its capsule, are the great objections to the method. Tyrrell's ingenuity overcame those difficulties, and effected even more; for by his operation the iris is not wounded, its pupillary edge is uninjured, and the danger of frustration from inflammation, when a pupil is made by dividing the iris,—although not likely in a healthy iris is not altogether absent,—is entirely overcome. Strictly speaking, there is a displacement of the natural pupil. Tyrrell's instruments for its performance are a broad needle and a blunt hook, known as "Tyrrell's Hook."

These are his directions how to perform the operation. The needle is passed through the cornea close to its junction with the sclerotica, and a free passage made for the hook, which is introduced with the bent portion forwards, and pushed on till it reaches the pupil, into which it is dipped. By turning the hook, the margin of the iris is caught, and by its withdrawal a portion is carried out of the incision in the cornea, observing, that when the bent portion of the hook arrives at the cornea, it must be made to resume its first position, to facilitate its exit. It is very important, that some of the aqueous humour should be retained till the iris has been secured by the hook; for when the iris is in contact with the cornea, the hook cannot be readily introduced without a risk of becoming entangled in the iris, nor can the pupillary margin be caught without some risk of injuring the capsule, although, I must observe, that mere contact between them, which must, indeed, often ensue when the operation is done, is not of any consequence. The cornea may be opened with any kind of knife, provided the incision is sufficiently small, whereby all the aqueous humour is not at once expelled, and the iris may be easily strangulated.

I have not time to make any remarks on conical cornea, beyond telling you that the imperfection in sight that it produces may be considerably improved by dislocating the pupil after the manner just described. It should be done sufficiently early before the apex of the projecting cornea has become ulcerated and opaque, or the eye inflamed. I think that the squint which ensues from the shifted pupil, by which the eye is obliquely placed, relieves, in a great measure, or prevents, the mechanical irritation which otherwise is reciprocal between the lids and the cornea, and the cause of the ulceration and the inflammation. A patient is now in attendance here who has conical cornea in each eye. The left has been lost from a penetrating ulcer on the apex; the iris did not prolapse. On the apex of the other is an ulcer, and the eye is much inflamed.

Prolapsus of the Iris, or Adhesion of the Iris to the Cornea—the Pupil destroyed or diminished, and the Cornea more or less opaque—the Lens and its Capsule transparent or opaque.—This results from the cornea having been opened by an ulcer or by a wound. When the wound is the result of accident, the eye is, with very few exceptions, so far otherwise injured as to be unfit for any operation.

Incision, with strangulation, is the appropriate operation for cases of complete closure of the pupil; but it must be done in a more limited and restricted manner than when the lens is absent. Frequently there must be uncertainty concerning the transparency of the lens and its capsule; and, till there is definite knowledge of their opacity, the operation must be conducted under the supposition of their perfection. With a broad needle, or a narrow knife, the iris is to be divided to a small extent close to its attachment to the cornea; the point of the instrument is to be kept well forwards to avoid wounding the capsule and the lens. With Tyrrell's hook the iris is to be caught, and as much of it as possible drawn out to the edge of the cornea and strangulated. A proper pupil may not be made, but a mere fissure result; then a second operation must be done when the eye has recovered. The cornea must be opened at another spot, according to the circumstances of the case, and one or other of the edges of the iris seized and strangulated. When the pupil is diminished, and a small portion of its margin attached to the cornea, that portion should be torn through, or severed with knife or scissors. Opacity of the cornea may render it necessary to adopt, besides, one or more of the processes I have described.

Adhesion or prolapsus may not involve the pupillary margin; but nevertheless contracts the pupil. Except a particular case were given, it would be impossible to say what should be done. I can only state generally, that the pupil may be formed by the hook, or the attached iris divided, care being taken that two pupils be not made.

According to the form, extent, and situation of the opacities of the cornea, and the locality of the adhesion or prolapse of the iris, must one or more out of all the operations that I have described be chosen and planned, ever bearing in mind the rule, that the more central the pupil can be made, the more useful will it be. Should cataract be discovered after a pupil has been made, or should it result from the operation, it must be treated by solution, or perhaps by depression.

I spoke in my last Lecture of the impediments that a bulging iris offers to operating. With few exceptions the cases that come under the present head possess those impediments. The iris is in contact with the cornea at some one part, and must nearly always be in close approximation at every part. It must therefore require great nicety to avoid wounding it, when the cornea is opened even to a small extent, and still greater care to pass a sharp instrument to any given distance between the iris and the cornea, without unintentionally injuring either. This practical difficulty obliges the hook to be resorted to in many cases to effect what may be possible by tearing. For scissors to be used the cornea must be freely opened; and this, for the same reasons, is rarely admissible.

Lastly, all the steps of whatever operation is to be adopted should be, as far as is possible, considered beforehand, that they may be executed promptly and effectually, the instruments not uselessly introduced within the eye, nor kept longer there than necessary. It should ever be borne in mind while operating, that the greater the delicacy with which the operation is done, the less likely is inflammation to supervene.

Nearly all the operations for artificial pupil, immediately after their performance, have a most unfinished appearance because of the flaccidity of the eye; those unaccustomed to them cannot judge of the result from the appearances at first presented. Young operators are pretty sure, unless they are cautioned, to make a larger pupil than is needed; and they try to give it some definite shape, which is not often possible. An apparently insignificant opening in the centre of the iris will expand to a proper sized aperture, when the wound of the cornea has united, and the chambers of the eye are filled. The success of the operations, immediate and permanent, is in a ratio to the healthiness of the eye and of the iris in particular. The after-treatment is just the same as when extraction has been done, of which the most important part is, tranquillity of the patient and perfect rest to the eye, and opiates to subdue pain. Blood that is poured out into the anterior chamber need not cause any apprehensions. I am not aware that it is attended with any disadvantage; it is soon absorbed, and does not require any special treatment. I am not able to say why the bleeding is only an occasional occurrence. This terminates what I have to say on the operations for artificial pupil. The next subject to which I shall direct your attention will be the affections of the eye-lids requiring surgical interference.

ORIGINAL CONTRIBUTIONS.

CASE OF PERFORATING ULCER OF THE STOMACH, WITH REMARKS.

By T. OGIER WARD, M.D.

April 22, 1850.—Catherine Clement, aged sixteen, a servant, has never menstruated, and suffers from anæmia, with pain in the left side, increased upon taking food, which is often rejected; but she is able to fulfil her duties without difficulty. Yesterday, as she looked *bilious*, her mistress gave her some salts and senna, which acted freely; about twelve a.m., she ate a quantity of cold rhubarb pudding; after that she had two more stools—five in all. She made no complaint whatever during the day, though she was seen by a medical man, who called accidentally at the house, and prescribed for the anæmia. In the evening she went to church, which she was obliged to quit from a sudden pain in the stomach, unlike any she had ever felt before; it was so violent that she could not proceed on her way home, but fell or lay down on the pavement, where she was found by a young woman, who helped her up, and carried her some distance, till she recovered a little, and was able to walk home with support. By this time she was so exhausted that her things were taken off, and clothes unloosed in the hall, and she was supported to her bed in the kitchen. Her mistress, thinking it a case of cramp of the stomach, to which she herself was liable, gave her some brandy and water, which was immediately rejected. A mustard-plaster was applied to the stomach; but she was so restless, and tossed herself about in such a manner, that it would not adhere, and another was applied. She lay with her knees drawn up on the left side, throwing her arms about wildly, and was evidently in extreme pain. She next asked to have her stomach rubbed, which was done, but very lightly, as she could hardly bear the slightest touch. She passed the night without sleep, very restless, and vomiting a clear fluid at intervals. She had another mustard-plaster in the morning, which seemed to relieve her; and then she had two cups of tea, which were retained, as was also some castor oil, which she took about 8 a.m. After this, she dosed a little, and then had some gruel, which she continued to sip at intervals.

About two p.m., she became much worse, and complained of want of power over the right side, and she was assisted up stairs to the back drawing-room, and put to bed, when she retched immediately, but brought up nothing but a little watery mucus containing some gruel. I was then sent for, and I arrived only in time to see another effort to vomit, after which she expired in a few minutes, the heart continuing to beat after respiration had ceased. She still lay on the left side with her knees drawn up. I immediately guessed the cause of death; on making percussion over the abdomen, it was dull throughout, the sound over the chest being quite clear.

Sectio Cadaveris twenty-one hours post-mortem.—Very little appearance of puberty, breasts just swelling, and a few hairs only on the pubes. Head not examined. Lungs healthy, but adherent to the pleuræ by old adhesions, which, on the left side, were mingled with a quantity of recently effused lymph, both clear and tinged with blood, beneath which the pleura was covered with points of ecchymosis, but I cannot say whether any vessels had formed in the lymph, though it was striated with fine lines visible to the eye. The pericardium contained about an ounce and a half of serum with small flakes of lymph. The right cavities of the heart were distended by black coagula, and the walls of the right ventricle were very thin about the centre. The tricuspid valve, on the side of the septum, was almost twice the natural size, and much freer than the others, the cords of which were much shorter. About two quarts of fluid, containing flakes of lymph, gruel, and castor oil, filled the abdomen. The peritonæum and intestines adhered slightly together on the left side by recently effused opaque lymph, easily separated. The liver was bloodless, the colour of putty, but healthy, though the cells appeared under the microscope, to contain rather more oil than usual. The stomach was almost empty, and on its anterior surface, about two inches from the œsophagus, and midway between the two omenta, was a perforation a third of an inch in diameter at the bottom of an ulcer three quarters of an inch in diameter, square, with hardish perpendicular edges. About an inch and a half from this, the mucous membrane seemed puckered as though by an old cicatrix of another ulcer. The mucous membrane, near the ulcer, was smooth and thickened, but not much softened, though it was studded with ramiform patches of congestion. The rest of the stomach was highly mammillated from the great development of the submucous glands and follicles. The intestines were healthy, but of a pink colour beneath the effused lymph. The uterus was very small. The right ovary was normal; the left cylindrical, with a cartilaginous tubercle at its extremity. The other organs were healthy. The gall bladder contained thick green bile, and two biliary calculi of a flattened form and granulated surface.

The only observation I have to make on this particular case is, to remark the extreme rapidity with which the inflammation of the peritonæum, caused by the escape of the contents of the stomach into its cavity, extended itself into the adjoining pleural cavity. There can be little doubt that the effusion of lymph into the left pleura was thus produced, the right pleura being quite free from any recent marks of inflammation from its greater distance from the seat of the abdominal inflammation, which was confined to the left side, to which the irritating fluids that escaped from the stomach naturally gravitated, from the patient continually lying upon that side from the time she was brought home until her death.

The ulceration which is the subject of the present remarks is described by Abercrombie and others as simple ulcer of the stomach, to distinguish it from various other lesions of that organ, produced by cancer and other affections. I am not aware that this kind of ulcer has ever been seen in its early stage before it has penetrated the submucous tissues, and therefore can say nothing respecting its origin, whether it commences in the mucous membrane, and passes perpendicularly downwards towards the peritonæum, or whether it arises from inflammation and ulceration of a submucous gland, or follicle, which, after extending to some distance beneath, opens, like the ulcers of the intestines, into the cavity of the stomach at first, and afterwards penetrates the peritonæum by the continuance of the ulcerative process. The form of the ulcer is round, oval, or square, as in the present case, with perpendicular edges more or less thickened and elevated, the mucous membrane being inverted at the edge, the muscular coat completely removed, and the peritonæum perforated by an aperture much smaller than the area of the ulcer. Sometimes there is more than one ulcer, either in the same stage of progress, or cicatrized, in which case the tissues round the cicatrix are puckered in radiating elevations. As the ulcers have generally been observed in parts of the stomach where the surrounding mucous membrane has been healthy, I am disposed to think that the ulcer originates in the mucous membrane itself, and not in the submucous glands, particularly as I have occasionally found a number of superficial ulcers in the cardiac portion of the stomach, which is more especially the seat of this disease, at least in females, for there is a remarkable difference in this respect between the sexes; all the ulcers in the male being situated towards the pyloric end of the stomach, with one or two exceptions, in which the extremity of the œsophagus was the part affected, whereas in the female the ulcerations are confined to the cardiac portion, or, at least, to the left of the median line. Again, if the ulcers were produced by inflammation of the submucous glands, they would probably be much more numerous, for we find the mammillated condition of the stomach which is produced by chronic irritation of these submucous glands usually extending over a considerable space, as may be observed in the case before us. The persons affected with simple ulcer of the stomach in these kingdoms are chiefly females; but in France the majority of the cases observed by Cruveilhier occurred in males. The complaint has not been found, in any instance, before the usual age of puberty; but a considerable proportion of the cases have been met with in women suffering from amenorrhœa emansionis, as in the present instance. The patients in almost every case were below the middle age.

The symptoms of ulcer of the stomach are usually those of common dyspepsia; but in several cases even these have been entirely absent. There can, therefore, be none which can be considered as pathognomonic; but those most usually present are, pain in the epigastrium and in the left hypochondrium, increased by pressure, and also on taking food, which is often rejected, at least in part. The pain and vomiting almost immediately succeed the entrance of the food into the stomach; but the latter stages of the digestive process are uninterrupted. Pain is also felt in many cases between the shoulders.

Such are the symptoms that ordinarily precede the rupture or perforation of the stomach by the ulcer; but the instant this has taken place, a burning pain is felt in the abdomen in a single spot, from which it radiates until it extends over the whole cavity, which becomes exquisitely tender to the touch. There is extreme depression, amounting to prostration of the vital powers; but syncope is not actually produced, though the pulse is very feeble. Vomiting is usually present from the first, but this symptom may be merely the effect of the sudden prostration. After a short interval some re-action occurs, and then we recognise the symptoms of most intense and acute peritonitis; but one symptom is present from the first, viz., the knees are drawn upwards to the abdomen, and the pain is increased by any attempt to straighten them, and extend the body. The abdomen is swollen and tense, but not always clear on percussion, as it may be dull from the amount of effusion, which takes place most rapidly. The patient is extremely restless, but perfectly rational, and often expresses a fear of death, which is usually verified in less than twenty-four hours from the commencement of the seizure. In some cases, however, the most urgent symptoms remit for a time, to be succeeded by another and fatal attack. In these instances adhesions of the viscera of the abdomen are found, which have precluded the escape of the contents of the stomach, and consequent extension of the inflammation.

In a few cases the ulceration corrodes the coats of one of the arteries of the stomach, and produces profuse hæmorrhage, which is ejected by vomiting, in the form of clots of blood, thus serving to distinguish cases of hæmatemesis, the result of ulceration, from that produced by sanguineous exudation from the mucous membrane, in which case the blood is darker in colour, and more fluid in consistence. From this symptom I was enabled to diagnose an ulcer in the stomach, in a case of fatal hæmatemesis.

It is a remarkable fact, that though the sur-

toms of perforation of the stomach are so strongly marked; yet, in very few cases do they appear to have been recognised previously to the death of the patient, consequently the treatment employed has usually been merely in palliation of the symptoms. From the success, however, that has attended more or less completely the treatment of cases of perforation of the intestines by opium, there is good ground for placing confidence in that rather than in any other of the remedies hitherto used. Purgatives, emetics, and aperient enemata, and all other remedies that excite the peristaltic action of the bowels, must be worse than useless, as the movements they occasion of the contents of the abdomen must have the effect of diffusing more widely the irritation produced by the effusion of the contents of the stomach. Opium has a directly opposite effect; it checks the vermicular motion of the bowels, while it supports the powers of nature until an exudation of lymph takes place, which glues the ulcer to the adjoining tissues, preventing the further escape of the contents of the stomach, and isolating the seat of the inflammation from the remainder of the peritoneal surface.

In cases where I have had reason to suspect the existence of an ulcer in the stomach, I have found a combination of tonics and astringents, with antacids and opiates, and giving very small quantities of the food most easily digested, whether animal or vegetable, fluid or solid, to have been most successful in allaying the symptoms.

Dr. Graves, of Dublin, has published two cases of the successful treatment of suspected perforation of the stomach by the use of opium.—*Clinical Medicine*: 2nd Edit.

The treatment by opium after perforation has taken place may be illustrated by the following case:—

Thomas Davies, aged 35, came under my care for acute inflammation of the larynx, January 13th, 1841. On the 17th he was much better; but, on the 18th, he was seized with pain in the right hypogastrium, attended with constipation, and distention of the bowels and vomiting. There was extreme tenderness on the slightest pressure over the affected part; his face was anxious, and he lay on his back with his knees drawn upwards. Suspecting a perforation of the intestines, as the pain had come on so suddenly, I ordered him calomel gr. v., op. gr. iss., to be taken every four hours. The next day the pain and tenderness were so much relieved, the expression of the features so natural, and the position of his limbs so easy, that I doubted the correctness of my diagnosis; and at night finding that the bowels were still confined, that the abdominal pains were not fixed, but moved about unattended with any tenderness on pressure, I ordered him a brisk aperient, which acted powerfully, bringing back the pain and all the former symptoms. I then resumed the opium, but the purging did not cease till the night of the 23rd, nor the vomiting till the 24th; he continued to sink, and died on the 26th, eight days after his first attack. It was not till the 23rd that I was told he had recently had an attack of fever.

On dissection, I found two perforations at the lower end of the ilium the sizes of a pea and a shilling, through which fæcal matter had escaped, and produced effusion of lymph as high as the liver. The stomach contained about a quart of matter having the colour and odour of fæces.

PRACTICAL CASES.

By THOMAS EDWARD AMYOT, Esq., M.R.C.S.E.

HÆMORRHAGIC DIATHESIS.

The two first cases I am about to relate are examples of the hæmorrhagic diathesis evidenced early in infancy, and the third is a fair sample of the vigour of an unimpaired constitution in the restoration of parts, even under very disadvantageous circumstances.

Case 1.—I was called to an infant five days old of rather weakly appearance, but who had not until now exhibited any decidedly unhealthy symptoms. I found hæmorrhage proceeding from the scrotum, and, as I then thought, from the wound of a pin. Some quantity of blood had been lost before my arrival, although various homely remedies had been applied. Cold, and some other means, however, at last succeeded; but, on visiting the little patient on the following day, I found that bleeding had taken place from the umbilicus, (the cord having separated shortly before,) and soon afterwards blood was seen oozing from the tongue, mouth, and gums, and was thrown plentifully from the stomach. It was also discharged from the bowel, sometimes pretty fresh-coloured, and sometimes dark and offensive; and whenever the surface was touched, or pressed ever so lightly, an ecchymosis followed. Alum, matico, and catechu were used, but in vain, and the infant died about seven days from the first hæmorrhagic symptom. I had no opportunity of examining the body. I should add, that the father is a healthy young man and the mother rather delicate,—neither of them disposed to hæmorrhage.

Case 2.—An infant had been suffering from bronchitis, and in the course of the treatment I had occasion to lance the gums freely; the hæmorrhage from them continued for about twenty-four hours, when I was sent for, and found from the clots thrown from the stomach and passed by the bowel, that it must have been very considerable. A saturated solution of alum was at first applied, but it greatly increased the mischief, so that the blood ran freely; but the tinct. ferri sesquichlor., laid on with a feather, was immediately successful. The child was very pale and quite exhausted; but, childlike, soon rallied and recovered. Now, this infant was a female, but the frequency of hæmorrhage in *male children* is worthy of remark. I would refer the curious in this matter to two papers, the one in the 12th Vol. of the "Medical Chirurgical Transactions;" the other in the 19th Vol. of "Braithwaite's Retrospect," (extracted from the *Medical Gazette*,) in which the occurrence of umbilical hæmorrhage in *four male* infants of one family is related by Mr. Edward Ray.

Case 3.—I was called to attend an infant three days old, whose scalp had been frightfully lacerated by the extreme violence of the woman who attended at the confinement. The injury extended from just above the outer angle of the left-eye at first, upwards and backwards, and then directly across the parietal bones to behind and below the right-ear, measuring, I should think, seven inches in length. It had been roughly sewed up with a large needle and very coarse brown thread (or rather twine) by the midwife directly after birth. The child now refused food, and appeared in a declining condition. I removed the suture, and merely applied some strapping-plaster, fully expecting that the profuse purulent discharge which was even now beginning would exhaust my young patient. The wound, however, healed most kindly by granulation.

Diss, Norfolk, June 1850.

HOSPITAL REPORTS.

KING'S COLLEGE HOSPITAL.

FEMORAL HERNIA IN A VERY CORPULENT WOMAN—

OPERATION—SUBSEQUENT SLOUGHING OF THE INTESTINE—ARTIFICIAL ANUS—DEATH AFTER SIX WEEKS.

There have been several cases of strangulated hernia in this hospital lately, which have required operation, and to one of these more particularly are attached such features of interest, that we shall give a sketch of it from the commencement. The patient was admitted into the hospital on the 16th of April, with a hernia in a state of strangulation. It appears that she had only perceived the existence of a rupture six weeks before, her attention having at that time been called to a small swelling in her groin. Two days before her admission the hernia became strangulated, and her symptoms increased in severity until the day of her entry, when she was suffering very much. There was constant vomiting. The woman was between 50 and 60 years of age, and enormously corpulent, consequently by no means a promising subject for any operative proceeding. Mr. Bowman, who had charge of this patient, attempted with care to relieve her by the taxis; but, as this made no impression, further delay was not permitted, and at three o'clock on the day of her admission she was carried into the theatre, and chloroform was given to her. On exposing the tumour, it was so very large and prominent, and it was so nearly situated in the inguinal region, that it was impossible to state with correctness as to its precise nature, *i. e.*, whether it were femoral or inguinal. Mr. Bowman having cut through the immense layer of adipose tissue, and having carefully divided the superficial layers of fasciæ, was able to determine as to the hernia being seated in the femoral ring. On the parts above mentioned being divided, what appeared to be the hernial tumour came into view, being separated into two portions by a strong band of fascia; but, on cutting through this, what was thought to be the hernia was a large mass of fat, much congested, and altered from its natural appearance, whilst the sac and its contents lay under, or rather above, the band of fascia mentioned. This being reached, was cautiously cut into, and a very large quantity of bloody serum was evacuated. The intestine which was strangulated was a part of the ilium, so congested that it was of a complete chocolate colour, but, on examination, it was found to be, in other respects, quite healthy; it was slightly adherent to the neck of the sac, but, on the division of Gimbernat's ligament, it was readily returned.

This patient continued in a pretty satisfactory condition for the first few days after the operation, although the constitutional irritation was somewhat severe. At the end of this period, however, the sac of the hernia took on the sloughing process, although no other portion of the wound, nor the tissues around, were in an unhealthy condition.

April 27.—During the last two or three days fæcal matter has been found to be coming from the wound made during the operation, and a portion of the intestine is seen lying in the wound in a gangrenous state. The general condition of the patient is much the same as it has been; the pulse is feeble, and the tongue is much furred; she takes her food, which consists of stimulants and nutritious broths, without producing any vomiting.

May 2.—The last few days this patient has been in a very unsatisfactory state; she has been harassed with a troublesome cough, and she has had some vomiting at times; she now lies in a dozing condition most of the day, but she does not get sleep at night. As regards the wound, the sloughing is still going on, and a considerable quantity of fæculent matter comes away from it; the tongue is dry and furred; pulse 120; very small and feeble. The main part of the treatment consists in giving a liberal amount of stimuli and nutritious fluids; and keeping the wound very clean.

7th.—The slough, consisting of the sac, has entirely separated from the wound, which is now beginning to granulate. Much less fæcal matter comes away from the wound—most coming through the natural passage; the patient is still much depressed; the pulse is weak and frequent; but the tongue is moist and much less furred; and she has been able to take some solid food without vomiting. She is ordered to continue her wine, and to have a mutton chop.

10th.—This woman is in a more satisfactory condition, although she lies most of the time in a low apathetic way; the wound is granulating well, but a large quantity of fæcal matter comes away from it, and scarcely any by the rectum.

15th.—The state of this patient remains much the same as before; if anything, she is lower, and she lies in the same dozing condition; her pulse is very small and feeble, and the face is somewhat dusky. She is able to take her nourishment; does not vomit.

25th.—This woman still continues in a curious condition. Since the last report her health has fluctuated much; for a few days she was very low, and appeared likely to sink; but, lately, she has improved again; her tongue has become cleaner; she takes her nourishment well, and the countenance is more cheerful. As the fæces almost entirely came by the artificial anus, and the opening in the intestine appeared to be valvular, Mr. Bowman tried pressure upon the upper lip of the wound; and this appeared to be of some service, as hardly any fæcal matter came away; but, at the end of two or three days vomiting occurred, and it was

found needful to remit the pressure. At this period, however, less fæces came through the opening, and more by the rectum. Her state really holds out some hopes of eventual recovery, although she is visibly declining much in flesh. She is taking chiefly a large quantity of stimulants,—wine and gin.

June 1.—Since the last report this patient again declined; her depression became more marked; there were no symptoms, however, of mischief in any organ, and none denoting inflammation; the pulse continued feeble, between 90 and 100; the tongue remained furred and dry; vomiting occurred at intervals. Some of the fæces came by the wound, some by the rectum. A large quantity of stimuli were given to her to support her, but she gradually got lower, and died on the last evening.

On *post-mortem* examination there was nothing particular found to account for death, and it was evident that the patient died from simple exhaustion. There was some slight effusion of lymph on the peritoneal surface of the intestines. On looking at the artificial opening, a beautiful specimen of what nature does to repair mischief from disease or injury was seen. A portion of the intestine (the ilium) which had been opened by ulceration, was in firm connexion by adhesive deposits to the orifice in the inner surface of the abdominal wall, so that no escape of fæcal matter whatever could occur into the general cavity of the abdomen.

In almost every case of strangulated hernia, one may learn something new, and, although there appears to be room for but little variety in this disease, yet the surgeon is constantly seeing cases which differ much from each other, and which present some peculiarities not frequently met with. The more we see this affection the more are we impressed with this fact, and we believe the relation of cases of hernia to be on this account particularly interesting and useful to the practitioner. In the one above narrated, there were features of interest both connected with the operative proceeding itself and also attached to the subsequent progress of the patient. It has been seen, that in the operation itself a peculiarity was met with: a large mass of fat, situated in the fasciæ, was so much changed from its natural appearance, that it looked exactly like the hernial tumour itself; and it was not until after some cautious dissection that the operator discovered its real nature. Mr. Bowman alluded to this at the time, and stated to the pupils that the peculiar appearance of this portion of fat had misled him at first, and that it was very likely to deceive an operator who might suppose that it was the protrusion itself, and, consequently, spend much time in cautious dissection. He stated, that in this case the fatty mass was one of the pellets which are found in the fasciæ of the inguinal region, much enlarged and congested, and hence its resemblance to the protruded bowel.

This case also shows to what an extent the Surgeon may be of use in his interference, and what strenuous efforts Nature makes for the purpose of repairing the mischief which occurs after an operation for hernia. Although death ultimately ensued, yet life was prolonged by the operative proceeding for upwards of six weeks, when otherwise death must necessarily have happened long before, and there is every reason to believe, that had the patient been a more favourable subject, the ultimate termination would have been successful, for she died from simple exhaustion, at least chiefly from that cause. But the woman was aged and excessively corpulent, two circumstances, taken together, very unfavourable to a happy result after any severe operation, and more particularly so after the operation for strangulated hernia. Nature had done her part of the work most admirably after the intestine had unfortunately been opened by sloughing, in so firmly attaching it to the edges of the wound in the integuments, that no extravasation of fæcal matter could take place into the abdomen, and a free outlet externally for the contents of the intestine was obtained. The treatment of the case after the artificial anus had been formed, consisted mainly in supporting the vital powers of the patient, which became so much exhausted, from the constant discharge of the contents of the small intestines, which contain a large quantity of nutrient material. This should be the main object in such a case, and the nourishment, as in the one under notice, should be chiefly fluid, especially if the efforts of the surgeon are more particularly directed to closing the opening, as there will be less discharge from it than if the ingesta were solid and less easy of absorption. Peyronie, in his observations on hernia with gangrene, has especially noticed the importance of this, and has illustrated it, by the relation of a case in which "the wound continued to close from day to day, but more or less according to the quantity of diet the patient used. When he increased his food the wound opened, and gave out more matter and fæces; when he decreased the quantity, the wound contracted and furnished less matter of any kind; at last he was only cured after four months, and after having been reduced for about three weeks to *very light and digestible food*, and small in quantity."

LONDON HOSPITAL.

AMPUTATION OF THE LEG.

The patient, a sailor who had just returned from sea, was admitted into the hospital, under Mr. Curling, for a very large spreading ulcer, occupying nearly the whole of the lower two-thirds of the leg, the edges being separated behind only by a thin strip of healthy skin. On his admission, the surface was very foul, and discharged a large quantity of extremely fetid pus. The man's health, though impaired by the constant drain upon his system, yet remained tolerably good.

Mr. Curling observed, that from the great extent to which the ulcerative process had proceeded, he had little hope of effecting its cure, and if indeed its healing could be produced by long-continued rest and mechanical support, yet as soon as the man resumed his occupation, the newly formed tissue would again rapidly undergo the process of ulceration. Under these circumstances he therefore recommended the removal of the leg, which was accordingly done by him, below the knee, on Thursday, the 2nd instant, by the flap operation, whilst the patient was under the influence of chloroform and ether, a mixture of equal parts being employed.

This is the second case which has lately occurred in this hospital where it has been found requisite to amputate in consequence of large incurable ulcers. The other patient is still in the hospital, and is under the care of Mr. Luke. In both instances the greater part of the flaps have healed by the first intention.

VIOLENT STRAIN OF THE BODY GENERALLY.

A well marked instance of this kind has lately occurred in the Hospital, in a short and extremely muscular man, a porter, who was admitted under Mr. Curling, having a short time previously been obliged to support for several minutes a cart-load of hay, weighing 18 cwt., in order to save himself from being crushed by the weight above him.

When brought here, he could scarcely move any of his limbs, and complained of violent pain over the whole of his body, more especially in the abdominal walls and in his legs and joints.

His face was puffy and injected, and his eyes ecchymosed so as almost to conceal the sclerotic.

The integuments over the deltoid and pectoral muscles were also ecchymosed, and there were several lines across his abdomen.

By perfect rest, attention to diet, and opiates to allay pain, the effects of the strain gradually subsided, and the patient, by the end of three weeks, was enabled to leave the hospital, complaining only of weakness and stiffness of his limbs.

The violent exertion of the muscles had caused rupture of some of the fibres, and cutaneous capillaries likewise to give way, and in this way the ecchymosis may be explained.

The injury, taken in connexion with the strain upon the ligaments, &c., necessarily arising from the great exertion, fully account for the lengthened period of repose which was required, in order that the nutritive processes might compensate for the injury which those structures had sustained.

The British Association will meet at Edinburgh July 31, under the presidency of Sir David Brewster.

PROGRESS OF MEDICAL SCIENCE.

FRANCE.

[Paris Correspondence.]

RE-OPENING OF THE SCHOOLS.

The return of the fine season has brought with it the usual re-opening of the summer courses. M. Cazenave has resumed his excellent lectures on diseases of the skin, at St. Louis; and Ricord his clinical conferences on syphilis, at the Hôpital du Midi. M. Becquerel, jun., is also delivering a very useful and instructive course of lectures on Hygiene. Indeed, great attention to this important, though long-neglected branch of the healing art, appears to have been excited at the present moment, whether from the late prevalence and expected recurrence of cholera, or from popular necessities, I cannot say. At the Palais National, the Conservatoire, the Ecole Centrale, and many other public establishments, we have now popular lectures on public and private hygiene, which are attended by the working classes with the greatest assiduity. Man is thus taught the better part of medicine—the way to avoid disease. Would it not be desirable that a practice in every way so worthy of imitation should find followers in our own country? Capability of imparting knowledge is not wanting amongst our junior practitioners, and the diffusion of popular instruction on the means of preserving health would assuredly be a more useful and honourable mode of acquiring fame than the doubtful expedient of self-supporting dispensaries.

PRECISE SEAT OF FECUNDATION.

At the last meeting of the Academy of Sciences, M. Coste read an interesting note on a point of physiology which, for many years, we have been accustomed to regard as settled. It has, in fact, been admitted by all modern physiologists, that fecundation of the ovum, in higher animals, may take place at any point of the afferent canal or of the uterus. M. Coste considers this opinion to be erroneous. In order that fecundation take place, it is evidently necessary that the ovum retain a perfect state of vitality when submitted to the influence of the fecundating fluid. But this state of integrity does not exist for ova found in the uterus or Fallopian tubes. This holds good for birds and the mammalia, at least. M. Coste has examined the bodies of females in these classes ten or twelve hours after the ova had passed into the afferent canals, and these unfecundated ova, even at that early period, were so far decomposed that the cicatricula and vitellus were manifestly deformed. Hence the Author concludes, "that since decomposition commences in the ova before they have traversed the first half of the afferent canal, fecundation can only take place above that point, viz., in the ovary, pavilion, or, perhaps, in the upper third of the oviduct."

NEW ANASTOMOSIS BETWEEN THE VENA PORTÆ AND THE INFERIOR CAVA.

M. Claude Bernard has discovered and described a new mode of anastomosis between the abdominal and general venous systems. This disposition was discovered in the liver of the horse. The porta and inferior cava, in that animal, are separated by the lobulus Spigelii, and it is at this point that the anastomosis now alluded to takes place. Oftentimes before, but generally soon after, it has entered the liver, the trunk of the vena porta gives off numerous branches, which accompany the cava for some time, and then anastomose with it in a very peculiar manner. At first sight they might be mistaken for a system of *vasa vasorum*; but further research shows that, instead of breaking up into capillaries, they suddenly dip into the cava and communicate with it. In other points, the branches unite to form a kind of ampulla which communicates directly with the cava vein. The anastomosing branches have no valves, and the communication takes place, in a very free manner, throughout the whole liver.

ANALYSIS OF THE BLOOD.

MM. Verdeil and Dolfus are now engaged in a very elaborate series of experiments to determine the composition of the blood. They have commenced with bullock's blood, because enormous quantities of blood are required to be experimented on before the best process applicable to the determination of

each constituent can be discovered. As the labours of MM. Verdeil and Dolfus are far from drawing to a close, I shall merely now allude to one or two points already illustrated by them. When the albumen was separated in the ordinary manner, and precipitated by alcohol, it was re-dissolved in water and again precipitated by the acetate of lead. The fluid which remained being filtered and treated with the sub-acetate of lead, another precipitate was formed. This was a salt formed between the lead and a non-azotised organic acid, which appears to have considerable analogy with the acids derived from the oxidation of sugar. Sufficient of this new salt for analysis has not yet been obtained, but when burned it gives out a strong odour of caramel. In addition to the above, the authors have found a considerable quantity of hippuric acid in the blood of the ox. It was obtained in a pure crystallized state; but the urea must be previously removed, and to effect this very great care and nicety are required.

BROMIDE OF POTASSIUM.

At a period when the high price of iodine rendered it almost impossible to employ that remedy in hospital practice, several efforts were made to substitute for it the bromide of potassium, and recently some have gone so far as to hint, that it may prove an anæsthetic agent nearly as powerful as ether. M. Huette published an excellent Memoir on this remedy in the last Number of the *Gazette Médicale*, from which we learn, that, although the alterative properties of the bromide cannot be depended on, it possesses narcotic powers of a very peculiar and energetic kind. The influence of these latter seldom appears until patients have taken from three to five ounces of the remedy, in doses gradually increased from two to twenty scruples, within a period of fifteen days.

A dull headache is the first effect, and the peculiar stupor, with an irresistible tendency to sleep, soon follows. This is interrupted by a strange kind of delirium, very different from that produced by any other narcotic. It resembles the stupid incoherence of idiocy, and is occasionally mixed with hallucinations. The muscular strength now rapidly gives way, and with it the general sensibility. The latter effect, however, is very seldom carried to any considerable degree, and the cases in which the bromide causes sufficient insensibility to admit of surgical operations being performed without pain are extremely rare. It cannot, therefore, replace ether or chloroform. The stupor and insensibility now described continue as long as the use of the remedy; but the functions of organic life are not troubled, and the effects rapidly disappear under the use of purgatives, or as soon as the use of the bromide is suspended. In this respect, its action resembles that of Indian hemp. One peculiarity is worthy of special notice. Even in very small doses, it rapidly and completely annihilates the sensibility of the pharynx and velum palati to such a degree, that these parts may be tickled without exciting the least effort at deglutition. This property may, perhaps, be turned to practical account.

SCOTLAND.

[Edinburgh Correspondence.]

GREGORY'S EDITION OF REICHENBACH. ODYLE.

Some speculation has been caused here by the recent appearance, under the auspices of an eminent Edinburgh Editor, of a translation of Baron von Reichenbach's researches on the new imponderable, which he terms "Odyle." By the same Editor, all that had then been published in Germany was brought out in an English dress in 1846. The German work is not yet finished, but the recent English publication includes a new edition of what appeared in 1846, as well as all that the Baron has since given to the world on the subject. And the great question with us now is, does the work deserve a serious examination? And be it remembered, the affirmative of this question implies not merely a deliberate study of what the book contains, but a careful application to its contents of the very first principles of the evidence of testimony in regard to allegations that cannot be tried by our personal experience. We are well satisfied of Reichenbach's just claim to a high reputation as a discoverer in chemistry, and we have as little doubt of his translator's (Professor Gregory) title to rank as an eminent chemist. Yet distinguished names have before now led the world astray, and it does not follow, that because individuals have shown great ability in experimental science, they are therefore trustworthy guides in cases where the evidence is wholly or chiefly moral in its character. There is nothing which the evidence of testimony is not competent to establish, except what involves an absolute contradiction. But the character of the testimony, and the whole circumstances attending it, must be very cogent when it asks belief for phenomena at variance with former experience, instead of merely seeking our assent to what readily coincides with the known course of nature. Baron von Reichenbach and his translator do not seem to have considered the matter in this, its proper light. They ask us to believe that certain individuals, and these chiefly of an excitable mental character, have the power, within the universal limits of distinct vision, to see a physical luminous agency, produced under certain variable conditions, which makes no impression on the visual organs of men in general. This is the Baron's new imponderable,—his so called Odyle,—among the sources of which are "magnets, crystals, the human body, the sun, the moon, the stars, heat, electricity, friction, chemical action, and the whole material universe." Of the quantity of evidence, or so called evidence, produced, there is no reason to complain, but its quality is hardly of a kind for our market. And it is this last circumstance which seems to give us the right to shut the book and refuse any further hearing to its statements. In a case where pretensions of this kind are put forward, we are entitled to expect some confession on the part of the author that there is such a thing as credulity in the world, and to see that in his investigations he has taken care to guard against its effects, both in himself and in the sensitive subjects of his observations and experiments. Instead of any case of this kind being manifest in the book, we find it everywhere abounding in such romance of statement as distinguishes the imitations of "The Mysteries of Udolpho." Dr. Gregory affirms, that Reichenbach's mode of investigation is the inductive method, "the same to which we owe all the progress of modern science." We could suggest an improvement on some of his experiments, which we think would bring them more nearly within the pale of inductive investigation. When the Baron finds, say an unexpected acid re-action developed in a chemical process, he does not content himself with merely using repeated slips of test paper to convince himself that, in the process believed to have been followed, such a re-action has arisen,—he repeats the process with new materials and new precautions against the presence of any before unsuspected element, and is only convinced when he has exhausted every possible source of chemical error. Let him borrow this mode of proceeding the next time Mademoiselle Reichel visits him at the Castle of Rusenberg, and consents to go in the dark to the churchyard of Grunsing. When she says she sees along one of the graves "a delicate breathing flame," let her not be taken to another grave where she might see "the same thing, only weaker;" for what is this second grave but a new test paper, when one is sufficient as regards her? but let her first description be taken down in writing in the most detailed manner, and then without delay let another sensitive (and it cannot be difficult to obtain one, since the Baron tells us that about one person in every three has this character), who has had no previous communication with her, be placed in exactly the same position, and let this sensitive's description be taken down in like manner. It is plain that the supplying of one sensitive after another, in quick succession, with as little change in the circumstances as possible, at the point chosen near the same grave, corresponds to the renewal of the materials and the performance of the operation anew in a chemical difficulty. The agent alleged to issue from the grave is a physical influence, and, if there be any truth in the Baron's discovery, the effect must be the same on the organs of the several sensitives. The point to be established is the existence in certain individuals of a power to see a species of light which the rest of men do not see. It is evident, then, that it is useless to multiply the experiments on one individual who cannot be proved to be trustworthy by any number of trials. In him the materials cannot be shown to be free from vitiation, except by the proof that a number of individuals are similarly affected by the self-same test, applied in exactly the same circumstances. This, as we think, is the true method of induction, as applied to the case. We recommend the Baron and his translator to consider the matter in this light, the philosophy of which we know they both understand far better than we can teach them. And we strongly advise them to cut out of their next publication on this subject all such tales as the following, of which there are too many in the book:—Pfeffel the poet was blind, and employed a young clergyman as his amanuensis. As the poet walked in his garden, holding the young man by the arm, he observed that, as often as they passed over a particular spot, the arm trembled. On being asked why, he at last confessed that he felt at that spot the kind of uneasiness which he knew indicated the presence of a human corpse. Pfeffel regarding this as a fancy, went with him to the garden, with the view of curing him. The young man would not go up to the place, but said he saw a luminous, ghost-like form floating over it, which represented a female form, with one arm laid across the body, the other hanging down; floating in the upright posture, but tranquil, the feet only a hand-breadth or two from the soil. The poet went alone to the spot, and struck about in all directions with his stick without any other effect than would have been produced on a flame. The same trials were often repeated, during several months, and were witnessed by numerous companies of people. At last the poet had the place dug up, and at a considerable depth was found a firm layer of lime, and beneath this the bones of a human being. When the bones were removed, and the pit filled up, the ghost no longer appeared. What theory, however true, could stand against the smothering influence of stories like this? Who answers for the particulars? How does it happen that not one of the numerous companies who witnessed the repeated trials ever saw the ghost except the young clergyman? What became of the 33·3 per cent. of sensitives all the while? Till Reichenbach confesses that such stories as this furnish no proof of the existence of Odyle, most of us here are determined to keep his book shut. These stories could be furnished to order from almost any district of the country, and to almost any amount. A ludicrous proof of this occurred in Edinburgh soon after the translation of Reichenbach's first part was published. In an interesting paper on Spectral Illusions, read before the Medico-Chirurgical Society of Edinburgh by Dr. Robert Paterson, of Leith, he referred to the story just recounted from Reichenbach, when a gentleman who was present immediately produced a similar story from the annals of the neighbourhood. In the county of Fife, some twenty years ago, an apprentice murdered his master, and, after burying the body in the garden, gave out that his master had gone on one of his accustomed business journeys, and soon after left the place himself. As the master did not return in a few days, as was his custom, inquiries began to be made; and, in the meantime, a gentleman's servant riding past the man's garden in the night for the doctor to his mistress, thought he saw a light. On returning with the doctor he again saw the light, and pointed it out, but the doctor could see nothing. So persuaded, however, was the servant of the reality of what he had seen, that he gave information to the authorities, and they had the garden examined, and the result was the discovery of the murdered man's body at the place where the light was seen, and the subsequent apprehension and execution of the apprentice. Dr. Paterson, on publishing his paper in the *Edinburgh Quarterly Medical Journal*, introduced the story in a somewhat different form, as obtained from persons who professed to be acquainted with it. In the amended form the gentleman's servant becomes a clergyman, who, riding home with a friend, saw a phosphorescent light near the bottom of the garden, which his friend could not see, and a lady, who knew well the particulars of the story, always understood the light to have been like a white smoke rising over the spot where the body

was afterwards found. Such is the story gravely published, with a kind of sanction from two Medical men and a learned Medical Society, to back Reichenbach's tale of the poet Pfeffel's amanuensis. Very different is the account given by those who were concerned in the investigation and in the trial of the murderer; for so far the story is true, that a weaver, Millie, in the parish of [illegible]nimail, was murdered by his apprentice and buried in his garden. The only concern which a gentleman's servant had in the discovery of the body was that, being in the garden when the search of the premises was going on by warrant of the authorities, he happened to jump from a higher part on a lower, and sinking over the shoes, owing to the softness of recently turned-up earth, showed where the grave was, and the only person concerned who represents the clergyman was a drunken, half-witted schoolmaster, who made some story about having seen lights in the garden; but so unimportant was this statement reckoned that it was not brought out on the trial whether these lights were seen before or after the discovery of the body, and it was clear to every one who had the means of knowing that the lights he saw were not "a rising white smoke, but the substantial lights of a neighbouring distillery which could be seen across the garden." If light was seen in the garden itself at any period, it was before the murderer left the place, as he must have used some kind of light when he buried the body and made away with the murdered man's property. Such is the general result when tales of this romantic kind are subjected to the process of daw-plucking. It is melancholy to think, that in the nineteenth century there should still be need to show that such legends do not legitimately fall within inductive investigation.

IRELAND.

[Dublin Correspondence.]

OPERATION FOR HARE-LIP.

The proper period for the performance of this operation has given rise to a very practical discussion in Dublin; a subject mooted some little time ago also at the Surgical Society of Paris. Sir Astley Cooper and Dupuytren, I need scarcely say, were against operating too early, for fear of convulsions; Mr. S. Cooper gave five months as perhaps the earliest; the impression of the Irish school, however, quite agrees with that of the more modern French school, that it cannot be done too early. The attention of the Profession in these countries, was first prominently called to it by Houston, in '42; since when, the operation has been performed in a variety of cases in Ireland, at the age of a few days, or a week or so; all the experience thus gained, is quite in favour of the early period. Five cases, operated on by Bellingham, were brought under the notice of the Society,—in three of which, however, from a wrong impression on the part of the parents, (which he was anxious to correct,) nothing was done till the child was somewhat grown. When a fissure in the bone complicates the hare-lip, the earlier the operation is performed the better,—the more perfectly will the parts unite,—the smaller will be the cicatrix, (a matter of great moment in girls,)—the parts to be excised are not so thick, and the resistance offered by the child is less. The objection from convulsions is perhaps one of no real moment. To quiet the infant, Bellingham found small doses of opium very useful. Dr. Jacob quite agreed with Bellingham. In a somewhat analogous affection,—congenital cataract,—he was in the habit of operating as early as possible: the process of absorption went on quicker. An additional advantage of operating early in hare-lip was mentioned by Kennedy. The unpleasant feelings in the mother's mind whilst suckling were removed; and perhaps, he might have added, the child itself is only after operation able to perform this very essential office.

MEDICAL CHARITIES.

Mr. Grogan's motion in the House of Commons, on the 4th inst., being refused, as there was no notice from head-quarters, the fate of the Dublin Hospitals seems sealed. The incidental debate, however, on a point to which attention has been drawn more than once in the *Medical Times*, and the progress of Medical Charities Bill deserve attention this week. A large sum, something like 80,000*l.* or 90,000*l.*, one moiety of the expenses of the medical officers under the Poor-law in England and Scotland, is defrayed annually out of the Consolidated Fund. Ireland, however, is left to shift as best she may, and the medical officers, exposed to all the obloquy of cheese-paring Guardians, now perhaps more than ever likely to exercise their "little brief authority." The question, in its original shape, has been negatived in the "House." Yet it seems a matter of very great interest, whether, by a little activity on the part of the Profession, some such arrangement could not be amalgamated with the present Bill now before it finishes its course in the Lords. If the Infirmaries and Dispensaries are to be essentially Poor-law establishments, it is only fair we should have a few of the advantages, along with all the very manifest and multifarious disadvantages. The 12th clause of the Medical Charities Bill subjects all Infirmaries and Fever Hospitals, with the exception of the Meath Hospital, the Jervis-street, Mercer's and Baggot-street, to the authority of the Commissioners; the 14th and 8th are rather unmistakeable as to saddling *all* expense on rates; the 20th, as to making Infirmaries mere supplementary workhouses, while the 21st clause seems cut out for Her Majesty's Treasury, sharing in the privileges of paying something for these novelties. Here we find the expense is to be diffused over the Union, in which, of course, there will be plenty of grumbling and bickering. One line in the 8th and 14th clauses would prevent a great deal of this, and the words, "cost of *all* medical relief," changed to "half," as in England, would prove a boon of no ordinary magnitude. Several other amendments have been proposed, with which every one now is familiar, and which are still before the Committee of the House of Commons.

PUERPERAL FEVER.

Some recent views on puerperal fever, mainly due to the vast field for studying this disease which the Dublin Lying-in Hospitals afford, deserve attention. Perhaps the Rotunda Lying-in Hospital of Dublin may rank with any hospital of the kind in Europe, not less for the crowds of pupils it disperses all over the world, than for the succession of able men as masters that, from time to time, have resided within its walls. The views I allude to are those of Professor Murphy and Dr. Churchill. A historical sketch of the disease by the latter, lately appended to a volume on the subject, brought out by the Sydenham Society, contains many points of interest. The views of Dr. Murphy, I need scarcely add, occur in a contemporary journal, and follow in the wake of our Irish school. Perhaps I may speak of both. Dr. Churchill confines himself to a strictly historical examination of the indications of this disease in our early writers, which, he says, are anything but marked or clear, from which we may conclude what is of very practical importance, that this disease, like many others, *owes its origin to our hospital system.* Of comparatively recent date, in point of fact, the first trace of an epidemic of the disease occurs in Paris about the middle of the last century. In 1760 it became known in England and Ireland, from which it has scarcely since been ever absent. Clark's account of it in Dublin quite agrees with that of Hulme and Strother—the first to give the disease a name. Dr. W. Hunter described it also, and told his pupils that no matter what was done, three out of every four attacked with puerperal fever would die. It is curious that now it became known almost at once at Edinburgh, Vienna, London, Leeds, and Dublin. In Dublin several epidemics are described; one by Churchill from notes of Labatt's, the mortality of which was quite appalling—86 deaths occurring out of 192 cases. Labatt conceived the contagion of typhus gave rise to puerperal fever,—an opinion perhaps not well founded,—the patients bringing in the seeds of the disease with them. Turpentine he found of little use, though before highly praised. Collins did not seem so sure about typhus originating the disease. In Evory Kennedy's mastership, from 1834 to 1840, the disease committed great havoc, its origin being equally doubtful. Dr. Clarke, who practised in Dublin for forty-four years, and attended 3847 private midwifery cases, met only 5 cases of the disease, and 3 of doubtful phlebitis in his private practice; and this almost inexplicable fact is confirmed by the private practice of Collins, Johnson, and others, showing a special connexion between the disease and the wards of lying-in hospitals. As noticed by Mr. Nunnelly, a remarkable coincidence has also been remarked between puerperal fever and erysipelas, the latter having the power of reproducing the former. Churchill differs from Lee as to the disease being solely of a local character. It is more, but he cannot say what; puerperal fever, plus the local disease, peritonitis, abscess, and gangrene, or phlebitis.

As to treatment, this historical sketch says little; nor is it easy to see one's way out of the maze of different and opposite things recommended from time to time, but on the hypothesis hinted at by Dr. Murphy of there being, at least, two, or perhaps three, different affections included under this one name. To take the most recent authority, Gamberini, who thinks vitiation of the blood, from what he terms a "seropurulent diathesis," the essential cause of the disease,—quinine and acids the chief remedy;—to Erhart and Reese, of New York, who trust to large doses of camphor and calomel, we have, I need scarcely say, all shades of opinion as to the nature of the disease, and almost the same as to treatment. In Dublin, some thirty years since, the *oil of turpentine* was lauded to the skies by Brennan, and used since with excellent effect in some cases; but it is manifestly not adapted to all. Then of bleeding, perhaps, we may say the same; in fact, the judicious Practitioner, keeping all these several remedies in mind, should not blindly yield his judgment to any, but treat every case according to its peculiar indications and separate points of observation.

SUBCUTANEOUS INCISION.

The subject of wry-neck, and its cure by division of the sternal origin of the sterno-mastoid, was brought under the notice of the Dublin Surgical Society at one of its last meetings; and the history of a case in which the operation had just proved successful, given by Bellingham. The man was admitted into St. Vincent's Hospital last September; the muscle was divided in some little time by the subcutaneous method, and he left the Hospital a month after, his neck quite straight. In the examination of the neck, the clavicular portion of the muscle seemed not at all engaged; indeed it is pretty obvious that we have in all those cases *two* muscles to do with: the *sterno*-mastoid, that engaged in the deformity; the *cleido*-mastoid merely a muscle of respiration. Mr. Rumley mentioned a curious case to the Society in the practice of Kirby, (which the latter, by the way, has set him a little right about since,) nearly the counterpart of the case just cited; only Dr. Kirby was obliged to divide the border of the trapezius, and some strings of fascia, the curious point in the case being that one of the eyes was drawn down a considerable way below the other,—a singular point suggesting, perhaps, caution in this operation in future.

NEW DISINFECTANT.

Professor Davy, at one of the late meetings of the Dublin Society, stated, he had discovered that ordinary "peat" was little, if at all, inferior to charcoal as a disinfectant. Charred peat (a form of charcoal) he looks on as all but invaluable for such purposes, in connexion with the curious experiments of Garrod on charcoal, in which camphor, musk, and even iodine, were entirely removed from their solutions; and many vegetable and animal poisons rendered completely innocuous. The matter is one of some interest.

ABUSE OF THE SPECULUM.

The abuse of the *speculum uteri*, which has so properly aroused the indignation of the more correct portion of the Profession,—a movement in which the *Medical Times*, much to its credit, took the initiative,—has been a matter of no little conversation among Irish obstetrics. A well-timed pamphlet on the subject, by Dr. Mitchell, has also just made its appearance. Another Dublin writer states that the abuse of the instrument, as with you, is "an evil notoriously of the first magnitude." In Dublin, he knows from his experience encouragement is given to quackery of every description; and to this among

the rest. "A low state of moral feeling exists among a class who patronise the quack more than the quackery, who encourage and associate with those who rely more on the *art* of treating disease so as to render it profitable" than on the science which renders medicine what it really should be — the noblest of human callings. Such things, if true, call for the loudest disapprobation. The agitation of opinion on the subject cannot fail to do much good, as showing the jealous care with which the thinking portion of the Profession, in trying to put a ban on such things, try to avoid that most crying sin—a trade in human sufferings.

NEW FUNCTION OF THE SPLEEN.

If there be a heavily taxed organ in the body it would seem to be the spleen. One of your writers, who seems himself spleen personified, maintains it to be the subterranean roots of that fine tree that branches out in the liver, and will allow no redemption to any one that will not take him at his word. Dr. Sunter, in a communication to an Irish periodical, states its office to be that of secreting bile or (reviving the old German dogma) the colouring matter of the bile, and looks on the splenic vein, with many other people, as an artery, like the pulmonary vessels of the same name, at least in function; and from emaciation attending a stopping up of the portal veins from phlebitis, he considers the mesenteric arteries take part in the process of absorption from the bowels. One thing is clear, and by no means unimportant in practice, that the spleen sends its blood to the liver before going back to the heart, pointing to some supplemental function performed by the liver, if the recent discovery of an anastomosis here does not spoil all our theories. The position of the spleen and liver in the abdomen, on each side of the stomach, suggests to Dr. Sunter some resemblance to the analogous depurating organs in the thorax. John Hunter, I recollect, in one of those thoughtful queries that he appends to his writings, says, "Why does hardening of the spleen bring on emaciation?" I think we can now answer him. Perhaps we may also soon solve the mystery why this large organ is placed in the highway of the "lesser circulation" of the portal system.

THE NEW UNIVERSITY.

The Irish Colleges have just had another grand ovation on the occasion of distributing premiums to the pupils. In Belfast the President congratulated the North of Ireland on the success of the new Institutions; while in the south, Sir Robert Kane, in his usual didasculous style, has been doing the same, Galway following, *longo intervallo*, this week. The charter and statutes of the three Institutions, under the title of "*The Queen's University*," are engrossed, and only wait the Queen's signature. In the Medical department, during the past session, everything has gone on very satisfactorily. The new diploma, judging from the ridiculously low rate of charges, will keep at home the crowds of young men that erst travelled the shortest way to Scotland; but where all these aspirants to Medical fame are to be employed, even the President at Belfast, (who holds out the Medical Charities Bill as a very Golconda of rich appointments,) or the President anywhere else, saith not. The Dublin College of Surgeons, too, admitted 45 licentiates during the past twelve months, and has 600 on its roll.

SELECTIONS FROM FOREIGN JOURNALS.

RESECTION OF RIBS.

In the *Philadelphia Medical Examiner* are the particulars of a case of caries of the ribs, in which Dr. M'Clellan performed the operation of resection. The patient was a large corpulent man, about 50 years of age. He recovered in six weeks, and lived twenty years afterwards. The carious ribs were on the right side, at the lower portion of the sternum. The cartilages were ossified, and engaged in the disease. The operation was performed as follows:—

Dr. M'Clellan commenced the operation by carrying a deep incision from the edge of the sternum outwards, to the distance of seven or eight inches, along the intercostal space between the fifth and sixth ribs. The edges of this incision were then dissected up until the surfaces of both those ribs were fully exposed. They were evidently ossified cartilages, carious throughout their whole length. The perichondrium was completely detached from the external surface of both, and thickened by induration of the surrounding cellular substance. It was therefore easily detached. The attenuated intercostal muscles and tendinous fibres were of course detached along with those membranes. The bones were thus left sufficiently bare to allow of the application of a Hey's saw, which was used twice on each rib. With a common elevator the bones were then prized up from their outer towards their sternal attachments, in accomplishing which, only two or three applications of the knife were required to cut away adhesions to the indurated mass of membranes and cellular tissue within. As the projecting extremities of the ribs were not perfectly sound, the incision was extended a little further outwards, and about one and a half inches more cut away. The lower portion of the sternum presenting a similar appearance of disease, a considerable portion of that bone was removed. On examining the exposed surface, there appeared a convoluted bony plate, surrounded by some indurated cellular tissue and medullary-looking matter, pressing upon the pleura costalis, and intruding upon the cavity of the chest. This was at first mistaken for the extremity of the seventh rib, which Dr. M'Clellan supposed had been turned inwards and upwards behind the corresponding cartilages of the fifth and sixth ribs. On a closer inspection, however, he was convinced that it proceeded from ossification of the sixth rib, which had attempted to set up a sequestrating process around the cartilage. The whole of this mass was easily raised by an elevator, which detached it clearly from the pleura. The intercostal fibres, both muscular and tendinous, were removed along with the bony plate, and the pleura was left thin as natural, rising and falling alternately with the efforts at inspiration and expiration. As there was not any hæmorrhage, the wound was dressed, and a broad compress and bandage applied. As before stated, the patient made a good recovery.

QUININE IN FEVERS.

Dr. Jewell, at a meeting of the Philadelphia Medical Society, expressed himself strongly as to the efficacy of large doses of quinine in fevers and intermittents. He believed that we were too timid in the treatment of fevers by quinine; and he was glad to find that the employment of the drug, without waiting for a perfect and distinct remission, was gaining friends. As for his experience, it was decidedly in its favour; nor had he witnessed those distressing effects upon the stomach and pulse which had been attributed to its use during the prevalence of fever. The approach of tinnitus aurium and partial deafness he looked upon as an indication of its influence upon the nervous system, but by no means a dangerous result. But he would not recommend its indiscriminate use in fevers: like other therapeutic agents, it required the exercise of judgment and discretion. In the administration of large doses of quinine in intermittent fevers he had had some experience. In 1825, the late Dr. J. Snowden, of this city, was accustomed to treat his cases of intermittent fever with decided doses of quinine. His usual habit was, after free purging, to administer during the intermission ten grains at one time, and he was very successful in the treatment of his cases. The same practice had been adopted by other practitioners. He (Dr. Jewell) had followed in the same path, and instead of prescribing quinine in grain doses every hour, during the intervals of the paroxysm, he directed five grains every two hours, until ten, fifteen, or twenty grains had been taken, according to the peculiar temperament or condition of his patient. This practice, with him, had been very successful.

ULCERATION OF THE CŒCUM.

Dr. Ramsay, of Raysville, Georgia, was called to see a stout, robust negro, aged 24, who had been complaining for some weeks of slight pain in the bowels and lumbar portion of the spine. When Dr. Ramsay saw him he was restless; pulse soft and voluminous, but not increased in action; skin warm; epigastric region and abdomen tender on pressure, but the man said he was not in pain. He also added that his bowels acted regularly, and there was not any nausea. He was ordered repeated doses of calomel, sinapisms, and an opiate. Towards morning he had a bilious evacuation, followed soon by a copious discharge of coagulated blood. Few minutes elapsed ere another took place, and the bleeding continued to increase greatly, so as to cause alarm. Dr. Ramsay was summoned, and found the man weltering in blood, pulseless, and rolling from side to side. On examining the rectum, blood was found running from it almost in a stream. He died soon afterwards. At the autopsy the stomach exhibited no disease. The spleen was corrugated. The liver contained some dark grumous blood, but looked natural and healthy. The intestinal tube did not exhibit any marked signs of disease, excepting in the cœcum, where it was ulcerated to the extent of nearly two inches, the ulceration presenting a dark greenish colour. Near the middle of the ulcer there was exposed the mouth of an artery, the coats of which had evidently been destroyed, thus producing the hæmorrhage. The calibre of the bowel was very much diminished; the appendix vermiformis was smooth and indurated; and about the point of ulceration the mesentery presented some marks of purulent deposit.—*Philadelphia Medical Examiner.*

MICROSCOPIC EXAMINATION OF HUMAN URINE BY MM. ROBIN AND VERDEIL.

When fresh urine is evaporated, a thin pellicle forms on the suface of the liquid when the evaporation has proceeded to a certain extent. Examined with the microscope, this is found to be composed of an amorphous mass, with crystals of urate of soda and neutral phosphate of lime. If evaporation is carried still farther, and the liquid allowed to stand, there form crystals of chloride of sodium and of creatine, which can be distinguished by means of polarisation. The existence of urea, of creatinin, and of some salts, may be easily proved by evaporating to a syrup, filtering and dividing into three parts. One part being evaporated to dryness, and treated with alcohol, gives evidence at once of urea, when to a drop of the alcoholic solution a proportionate quantity of nitric or oxalic acid be added. The addition of a few drops of chloride of zinc to another part, throws down, in two or three days, the double salt of chloride of zinc and creatinin. The third portion, being mixed with three times its weight of absolute alcohol, throws down, after twelve hours, crystals of neutral phosphate of soda; twenty-four hours afterwards, crystals of acid phosphate of soda form. The addition of a little ammonia will bring into view the phosphates of lime and magnesia.—*Gazette Médicale, Av. 27.*

CATARRHAL PNEUMONIA.

During the whole of the last winter, there has been in Paris an unusual prevalence of bronchitis, angina, and diarrhœa. This has been so marked as to lead some to consider that a veritable "catarrhal epidemic constitution" prevailed, which not only facilitated the production of the complaints above stated, but also impressed its own type upon other affections. Typhoid fever, for example, has been remarkable for the gravity of its thoracic symptoms; so also in the case of the eruptive fevers, and many cases of pneumonia have presented variations from their usual course which have led to the employment of the term "catarrhal pneumonia" for these exceptional forms. The "catarrhal pneumonia," as observed at La Charité, is thus described by M. Guéneau de Mussy. In place of commencing in its usual abrupt manner, the disease was preceded, for some days, by a simple bronchitis, to which insensibly succeeded the characteristic symptoms of pneumonia. The initial shivering, so frequent in ordinary cases of pneumonia, was absent or was slight; the expectoration was opaque, white, and mucous-looking; if at all coloured, was mixed with much uncoloured catarrhal secretion. The local symptoms were frequently merely sibilant and subcrepitant rhonchi, followed by the tubular respiration of solidification; sometimes, but less often, there was crepitant rhonchus. The general symptoms were severe; the headache was intense and persistent; there was insomnia, sometimes delirium, and weakness amounting to prostration. Both lungs were frequently affected. Antiphlogistic remedies were borne with difficulty, but tartar emetic

and vesicatories were of great service.—*L'Union Méd.*, Av. 20.

[Although no special outbreak of influenza occurred in Paris in 1849-50, yet the above description will strike every one as resembling very much the phenomena of influenza, as if there had been a persistent and comparatively mild epidemic "influenza constitution."]

LOCAL APPLICATION OF CHLOROFORM.

M. Bordet reports a case in which two deep eschars were made by means of Vienna paste, without the least pain, the places having been previously drenched with chloroform for ten minutes. The application of the caustic did not cause the patient so much pain, as to equal the slight burning sensation produced by the chloroform itself. It is suggested that abscesses may be opened, or bodies near the surface extracted without pain, by the same means.—*L'Union Méd.*, Av. 27.

M. Aubrun reports a case in which violent neuralgic pains occurred ten days after an attack of shingles, in the parts which had been affected. Enormous doses of opium and of belladonna gave no relief, but a single application of chloroform to the part removed the pain in fifteen minutes. M. Aubrun has also employed chloroform locally to certain carcinomatous tumours with great temporary relief.—*L'Un. Méd.* Mai 14.

PARALYSIS OF THE BLADDER CURED BY INJECTION OF SOLUTION OF STRYCHNINE.

A man, aged 68, after a drinking bout and exposure to cold, found himself unable to empty his bladder. After many painful ineffectual attempts to do so he requested the aid of M. Leclayse, who passed in a catheter and drew off a large quantity of urine. Eight hours subsequently, however, the bladder was again filled, and the patient was totally unable to empty it. The catheter was again employed, but, after its withdrawal, the bladder again filled. For some days the urine was simply drawn off, under the belief that in a short time the muscular fibres of the bladder would recover their contractility. Various measures were afterwards employed, at first with the idea of overcoming some imaginary spasm of the neck; but, as the catheter could be introduced with perfect facility, this notion was soon given up, and turpentine, copaiba, stimulating diuretics, as uva ursi, juniper, &c., were given internally, and cold applications were applied externally. These measures being useless, cantharides was then tried, but produced such irritation that it was obliged to be abandoned. Ergot of rye was then given internally without benefit; and, finally, strychnine was administered, and gradually augmented till upwards of a grain a day was given, and till it produced spasmodic contractions of the muscles of the trunk and extremities. These means were as ineffectual as those previously used; and after ten weeks of treatment the state of the bladder remained unaltered. Fifteen days were now allowed to pass by without treatment, at the end of which time M. Lecluyse conceived the idea of injecting strychnine at once into the bladder. Six grains of strychnine, with a little alcohol, were dissolved in a pint of water, and two ounces were injected four times every day, the bladder being previously emptied. For four or five days no effect was perceptible, but at the end of that time some urine appeared between the sound, which had been retained in the bladder and the urethra; on removing the sound, the patient found that he had completely regained voluntary command over the bladder. From that moment there was no further inconvenience.—*Annales de la Société d'Emulation de la Flandre Occidentale*, 1850.

[It does not seem improbable that this method may be found useful in some cases of retention of urine in old men; and it may also be thrown out as a suggestion, whether injections of strychnine might be used to the colon in some cases of obstinate constipation, which seem to depend on some amount of loss of contractility of the colonic muscular fibres.]

PROVINCIAL MEDICAL ASSOCIATION.—The Anniversary of this Association will be held at Kingston-upon-Hull, on the 7th and 8th of August next, under the Presidency of Dr. Horner.

A NEW HOSPITAL is about to be erected at Pembroke, for the benefit of the troops in the garrison.

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THE MEDICAL TIMES.

SATURDAY, JUNE 22, 1850.

We lay before our readers this day the Report from the National Vaccine Establishment, dated April 2, 1850, and recently presented to both houses of Parliament by command of Her Majesty. This document is well worthy of perusal. It is infinitely superior to any Report which has emanated from the same body for many years past, and affords reasonable grounds of hope of still better things in future. We shall proceed to offer a few remarks upon it, and if, in so doing, we may appear fastidious and unthankful, we would beg our readers to withhold their judgment until the Report for 1851 shall have appeared, and tested the justice or injustice of our criticisms.

The first point to which we would invite attention is the statement, that the practice of inoculation for the small-pox still *continues*; and the Board express their regret, "that they have no power of punishing offenders practising illegal inoculation." In another sentence, we learn that "the practice of variolous inoculation is permitted in Ireland." The reader is left quite in the dark whether England, Scotland, and Wales participate in this crime. We have carefully perused the Registrar's Notes appended to the Quarterly Tables of Provincial Mortality, and we cannot call to mind one single instance in which such a practice has been detected. A stray case or two may possibly have occurred in this country; but we are persuaded, that any systematic attempt to propagate small-pox by inoculation in any district of England or Wales would be speedily reported to the Poor-law Commission, and as speedily punished and suppressed. Nor do we believe that our Scottish neighbours are in this respect *participes criminis*. We strongly suspect that Connaught is the only sinning locality, and that the spread of small-pox in *England* is in no degree attributable to such a practice, or capable of being controlled by that penal process which the Vaccine Board covet.

There is, we believe, more foundation for the complaint, that the wandering Irish carry small-pox through the towns and rural districts of England; but the Board, in attributing the spread of the disease so much to this source, seem to lose sight of the great laws of epidemic diffusion, which apply equally to cholera and to small-pox.

We do not exactly see the force of those references to the years 1817 and 1819, which the Report contains. What we are anxious to learn is, the condition of the inhabitants of England with reference to their security from small-pox, in the particular year ending 1st April, 1850; and in that respect, certainly, the Report of the Board is remarkably deficient. The Board, indeed, say that "no facts have occurred calculated to shake *their* confidence in vaccination." In another place they say "that they have never ceased to explain, in their annual reports, the grounds of their unshaken confidence in the protective influence of vaccination." In a third sentence they reiterate the assertion, by expressing their disbelief that "any doubt should still exist in the minds of well-educated persons that vaccination is a reliable safeguard against variolous infection." Now, what can all this mean? Is it that the reports which reach us from all quarters of the occurrence of small-pox after vaccination are fables—weak inventions of the enemy? Is it that the outcry for revaccination which resounds from one end of the land to the other is childish and without meaning? Do the Board countenance or discountenance the practice of revaccination? They refer Her Majesty's Government, with apparent satisfaction, to the practice of foreign countries; but the Board cannot be ignorant that the Wirtemberg Government, the Prussian Government, that of Austria, and more recently that of Belgium, have declared that *once* undergoing the process of vaccination is not sufficient. They surely know that revaccination is practised by wholesale in the great Continental armies. We rely upon hearing, in the next Annual Report of the Vaccine Board, something that may serve as a guide to the people of England on the great question of revaccination.

The Board, in their present Report, direct their attention, almost exclusively, to the aggravated forms of small-pox in the unprotected. They speak of *rapid and fatal* invasions of small-pox; they notice the *victims* of small-pox,—those who either died, or were blinded, maimed, or deformed for life, through the negligence of their parents; but the Board make no allusion to that milder form of small-pox now so frequent in this country, which destroys but a very small proportion of those who are seized with it,—seldom more than 6, often not more than 4 per cent.

The Board, in attributing the mortality of small-pox to the absence of those means "which may deter the infected from mixing with the *unprotected* population" of the country, lose sight of the admixture of the same among the vaccinated part of the population. Surely the Board do not mean to say, that the *vaccinated* may, *at all periods of life*, and under all circumstances, safely and freely intermix with those labouring under small-pox,—that the fears of families, in this respect, are *utterly* groundless, and that the *unprotected* alone are likely to suffer from such exposure. Yet the expressions we have quoted carry with them such a corollary. Perhaps, in their next Report, the Board will be more precise, for really this is a matter which comes home to the bosoms of all. If small-pox should, by such accidental exposure, break out in a family, is it proper to separate the infected individual from the *vaccinated* portion of the family, or is such separation a matter of indifference?

The Report quotes a curious and interesting

fact deduced from the Vaccination Returns of the Poor-law Commissioners, viz., that the number of children under one year, vaccinated during the year ending September 29, 1848, at the public expense, amounted to 33 per cent. of the total number of births registered during the same period. The Board is struck with the *smallness* of this number, and considers it a proof of inattention on the part of parents, and indifference on the part of the public, to the advantages of vaccination. In this opinion we cannot coincide. We are first to consider how many may have been vaccinated at the cost of their parents. We can hardly estimate this at less than the half of those vaccinated at the public expense, for parents in easy circumstances are careful, and have their children vaccinated as regularly as they are christened. This would give 50 per cent. of the population vaccinated. Then we must remember, that of every 100 children born, 27 or 28 die in their first year. Lastly, we are to reflect that many children are not vaccinated till the second or third year of life. All things considered, we should look on 33 per cent. of the infantile population in the first year of life, vaccinated *at the public expense*, as a proportion creditable to the country rather than otherwise; and we doubt very much whether, under any arrangement, it can materially exceed that number.

The Board speak of the great "and acknowledged defects of the system of vaccination" pursued in this country. We do not know what the Poor-law Commissioners will say to this compliment, but we confess to some little scepticism on the subject. The Government offers gratuitous vaccination to the *whole* population of this country, rich and poor, rural and urban. The National Vaccine Establishment supplies 173,000 charges of lymph at the public expense, and vaccinates gratuitously 9000 of the Metropolitan population. The Small-pox Hospital and the Jennerian Institution vaccinate about 6000 more. The former institution supplies vaccine lymph gratuitously to every Medical Practitioner in the three kingdoms who chooses to apply for it. In Ireland, the Institution in Sackville-street (supported partly by Government, and partly by private resources) is in full activity. Scotland may safely be allowed to take care of itself. In all this, we fail to trace those great and acknowledged defects which, according to the Vaccine Board, place England so far behind the Continental nations in respect to our national encouragement of vaccination.

But we will not find more faults. As we said at first, so we conclude. The present Report indicates unusual activity on the part of the Board, which we hail with pleasure. We trust they will continue to devote their attention to a matter of such national importance as vaccination, and the *precise* amount of its prophylactic power, and give us annually the well-digested fruit of their labours.

THE VACANCIES IN THE COUNCIL OF THE COLLEGE OF SURGEONS.

The time is approaching when the Fellows of the Royal College of Surgeons will be re-assembled in London for the purpose of electing three of their number as members of that Council which is to represent the Profession in its dealings with the Government, and in its intercourse with other learned Bodies both at home and abroad. The first vacancy is caused by the death of Mr. Andrews; the second and third by the retirement, in rotation, of Mr. Grainger and Mr. Pilcher, both of whom, however, are re-eligible, and likely to be again proposed for the ballot.

It is not within our province, nor, even were it so, should we feel it, under ordinary circumstances, our duty to single out from the College list the name of any one Fellow who should be the special mark of favour or disapproval. Such a step might be fairly regarded as offensive to the general body of electors, who, in the exercise of that power entrusted to them, are called upon, by every feeling which they possess for the dignity, the high standing, nay, even the respectability of the Profession, to make themselves acquainted, before assembling in the College Theatre, with the merits and the demerits of those whose names are likely to be submitted to them. Our remarks apply especially to the Provincial Fellows, who meet upon the appointed day in sufficient numbers to carry the election which way they will. If they wish to preserve the constitution of the Council as they would desire it to be,—composed of none but the leaders in the Profession,—they must learn the art of black-balling; to elect to such a post an unfit man, is a dereliction of duty equal to the passing by of one in every respect *sans reproche*. We have heard with unfeigned regret, that upon the present occasion the disreputable practice of canvassing for votes has come into vogue. If the scientific, professional, and social position of any one Fellow be such as to entitle him to the confidence of his brethren, what need has he or his friends to canvass? If he require to foist his name into notoriety by every means save the right, he can be no fit person to represent a large body of gentlemen claiming to hold an equal rank in talent, education, and gentlemanly position, with members of the Bar or of the Church. We hope the Fellows will express their opinion upon this point in a way not to be mistaken.

When Mr. Grainger was first elected upon the Council, he resided beyond the specified distance from town; and it was asserted, that he overcame the difficulty which might arise therefrom, by the temporary occupation of a small part of an unpretending tenement near the Strand. Perhaps it is rather hard to expect a candidate to announce his own disabilities, which he makes no attempt to conceal; but we doubt if Mr. Grainger, who is an honourable man, could define himself, without a smile, a *bonâ fide* surgeon, practising within five miles of the General Post Office. The example being set and the precedent established, owing to the carelessness of the electors, let us see to what it leads. If Mr. William Sands Cox, of Birmingham, or Mr. David Browning Major, of Canterbury, both eminent men, had chosen respectively to hire for a few weeks a two-pair back, or even a brass plate in Soho, they might have been Mr. Grainger's colleagues. We recommend this suggestion to some of the Provincial Fellows; they might perform their duties very efficiently by the aid of the electric telegraph and the railway, those annihilators of time and space. But Mr. Grainger now resides within the proper distance, at least we presume so. He has to thank Mr. Wyld, the celebrated map publisher, for having marked out the distance in red ink with a broad nibbed pen; for he lives *upon the line*, having got away as far as possible from the busy metropolis. In the quietude and retirement of Hornsey, he turns his mind to the wants and exigencies of the hard-worked Practitioner.

The Fellows have next to decide upon the merits of Mr. Pilcher, the aurist. Let them ask themselves, Is one who practises so narrow a specialty fitted to rank with the heads and rulers of the Profession? Gentlemen Electors, your appointments are canvassed by other learned associations, who see in your body at large the reflection of your own errors. During this period of professional excitement and insurrection, many have been the meetings at which resolutions have been expressed relative to the status of the English surgeon, in some respect reminding one of the proceedings of our Transatlantic brethren, who vote themselves, upon all occasions, the greatest, the freest, the most glorious people upon the earth. Any public allusion to the necessity of a more finished education, or the cultivation of higher tastes, throws the English Surgeon into a convulsion. We do not doubt Mr. Pilcher's ability as an aurist; but we ask, is he in a position to become one of the rulers of the Profession? There is one point, in conclusion, to which we must draw the serious attention of the Fellows. Upon the door of No. 7, Great George-street, Westminster, are the names of Mr. W. Maule and Mr. J. Pilcher; we ask, When did Mr. Maule, the aurist, reside and practise in Great George-street, Westminster? Of what College is he a Member? Is this a firm? Or what kind of partnership exists between Mr. Pilcher and Mr. Maule? Can it be that a Member of the Council of the Royal College of Surgeons of England has associated his name with one belonging to no recognised College at all, for the purpose of keeping together "old customers?" Has Mr. Maule retired from business, and left Mr. Pilcher the goodwill and fixtures, "Pilcher, late Maule, aurist?" What would be said, if a member of one of the Inns of Court were to have painted over his door, "Pleydell, Q.C., late Rebutter?" His chance of becoming a Bencher would be but small, however attractive the old name might be to those who had respected it in times gone by.

PUBLIC HEALTH.—HABITATIONS OF THE POOR.

It is only within the last few years that various questions connected with the health and well-being of the poorer classes have been seriously taken up by the different Governments of Europe. Nor did they condescend to discharge this obvious and paramount duty until driven thereto by necessity. In England, for example, the poor and working classes were allowed to live—or rather, to die—under the influence of a thousand insalubrious agencies, which proper

Nearly all the operations for artificial pupil, immediately after their performance, have a most unfinished appearance because of the flaccidity of the eye; those unaccustomed to them cannot judge of the result from the appearances at first presented. Young operators are pretty sure, unless they are cautioned, to make a larger pupil than is needed; and they try to give it some definite shape, which is not often possible. An apparently insignificant opening in the centre of the iris will expand to a proper sized aperture, when the wound of the cornea has united, and the chambers of the eye are filled. The success of the operations, immediate and permanent, is in a ratio to the healthiness of the eye and of the iris in particular. The after-treatment is just the same as when extraction has been done, of which the most important part is, tranquillity of the patient and perfect rest to the eye, and opiates to subdue pain. Blood that is poured out into the anterior chamber need not cause any apprehensions. I am not aware that it is attended with any disadvantage; it is soon absorbed, and does not require any special treatment. I am not able to say why the bleeding is only an occasional occurrence. This terminates what I have to say on the operations for artificial pupil. The next subject to which I shall direct your attention will be the affections of the eye-lids requiring surgical interference.

ORIGINAL CONTRIBUTIONS.

CASE OF PERFORATING ULCER OF THE STOMACH, WITH REMARKS.

By T. OGIER WARD, M.D.

April 22, 1850.—Catherine Clement, aged sixteen, a servant, has never menstruated, and suffers from anæmia, with pain in the left side, increased upon taking food, which is often rejected; but she is able to fulfil her duties without difficulty. Yesterday, as she looked *bilious*, her mistress gave her some salts and senna, which acted freely; about twelve a.m., she ate a quantity of cold rhubarb pudding; after that she had two more stools—five in all. She made no complaint whatever during the day, though she was seen by a medical man, who called accidentally at the house, and prescribed for the anæmia. In the evening she went to church, which she was obliged to quit from a sudden pain in the stomach, unlike any she had ever felt before; it was so violent that she could not proceed on her way home, but fell or lay down on the pavement, where she was found by a young woman, who helped her up, and carried her some distance, till she recovered a little, and was able to walk home with support. By this time she was so exhausted that her things were taken off, and clothes unloosed in the hall, and she was supported to her bed in the kitchen. Her mistress, thinking it a case of cramp of the stomach, to which she herself was liable, gave her some brandy and water, which was immediately rejected. A mustard-plaster was applied to the stomach; but she was so restless, and tossed herself about in such a manner, that it would not adhere, and another was applied. She lay with her knees drawn up on the left side, throwing her arms about wildly, and was evidently in extreme pain. She next asked to have her stomach rubbed, which was done, but very lightly, as she could hardly bear the slightest touch. She passed the night without sleep, very restless, and vomiting a clear fluid at intervals. She had another mustard-plaster in the morning, which seemed to relieve her; and then she had two cups of tea, which were retained, as was also some castor oil, which she took about 8 a.m. After this, she dosed a little, and then had some gruel, which she continued to sip at intervals.

About two p.m., she became much worse, and complained of want of power over the right side, and she was assisted up stairs to the back drawing-room, and put to bed, when she retched immediately, but brought up nothing but a little watery mucus containing some gruel. I was then sent for, and I arrived only in time to see another effort to vomit, after which she expired in a few minutes, the heart continuing to beat after respiration had ceased. She still lay on the left side with her knees drawn up. I immediately guessed the cause of death; on making percussion over the abdomen, it was dull throughout, the sound over the chest being quite clear.

Sectio Cadaveris twenty-one hours post-mortem.—Very little appearance of puberty, breasts just swelling, and a few hairs only on the pubes. Head not examined. Lungs healthy, but adherent to the pleuræ by old adhesions, which, on the left side, were mingled with a quantity of recently effused lymph, both clear and tinged with blood, beneath which the pleura was covered with points of ecchymosis, but I cannot say whether any vessels had formed in the lymph, though it was striated with fine lines visible to the eye. The pericardium contained about an ounce and a half of serum with small flakes of lymph. The right cavities of the heart were distended by black coagula, and the walls of the right ventricle were very thin about the centre. The tricuspid valve, on the side of the septum, was almost twice the natural size, and much freer than the others, the cords of which were much shorter. About two quarts of fluid, containing flakes of lymph, gruel, and castor oil, filled the abdomen. The peritonæum and intestines adhered slightly together on the left side by recently effused opaque lymph, easily separated. The liver was bloodless, the colour of putty, but healthy, though the cells appeared under the microscope, to contain rather more oil than usual. The stomach was almost empty, and on its anterior surface, about two inches from the œsophagus, and midway between the two omenta, was a perforation a third of an inch in diameter at the bottom of an ulcer three quarters of an inch in diameter, square, with hardish perpendicular edges. About an inch and a half from this, the mucous membrane seemed puckered as though by an old cicatrix of another ulcer. The mucous membrane, near the ulcer, was smooth and thickened, but not much softened, though it was studded with ramiform patches of congestion. The rest of the stomach was highly mammillated from the great development of the submucous glands and follicles. The intestines were healthy, but of a pink colour beneath the effused lymph. The uterus was very small. The right ovary was normal; the left cylindrical, with a cartilaginous tubercle at its extremity. The other organs were healthy. The gall bladder contained thick green bile, and two biliary calculi of a flattened form and granulated surface.

The only observation I have to make on this particular case is, to remark the extreme rapidity with which the inflammation of the peritonæum, caused by the escape of the contents of the stomach into its cavity, extended itself into the adjoining pleural cavity. There can be little doubt that the effusion of lymph into the left pleura was thus produced, the right pleura being quite free from any recent marks of inflammation from its greater distance from the seat of the abdominal inflammation, which was confined to the left side, to which the irritating fluids that escaped from the stomach naturally gravitated, from the patient continually lying upon that side from the time she was brought home until her death.

The ulceration which is the subject of the present remarks is described by Abercrombie and others as simple ulcer of the stomach, to distinguish it from various other lesions of that organ, produced by cancer and other affections. I am not aware that this kind of ulcer has ever been seen in its early stage before it has penetrated the submucous tissues, and therefore can say nothing respecting its origin, whether it commences in the mucous membrane, and passes perpendicularly downwards towards the peritonæum, or whether it arises from inflammation and ulceration of a submucous gland, or follicle, which, after extending to some distance beneath, opens, like the ulcers of the intestines, into the cavity of the stomach at first, and afterwards penetrates the peritonæum by the continuance of the ulcerative process. The form of the ulcer is round, oval, or square, as in the present case, with perpendicular edges more or less thickened and elevated, the mucous membrane being inverted at the edge, the muscular coat completely removed, and the peritonæum perforated by an aperture much smaller than the area of the ulcer. Sometimes there is more than one ulcer, either in the same stage of progress, or cicatrized, in which case the tissues round the cicatrix are puckered in radiating elevations. As the ulcers have generally been observed in parts of the stomach where the surrounding mucous membrane has been healthy, I am disposed to think that the ulcer originates in the mucous membrane itself, and not in the submucous glands, particularly as I have occasionally found a number of superficial ulcers in the cardiac portion of the stomach, which is more especially the seat of this disease, at least in females, for there is a remarkable difference in this respect between the sexes; all the ulcers in the male being situated towards the pyloric end of the stomach, with one or two exceptions, in which the extremity of the œsophagus was the part affected, whereas in the female the ulcerations are confined to the cardiac portion, or, at least, to the left of the median line. Again, if the ulcers were produced by inflammation of the submucous glands, they would probably be much more numerous, for we find the mammillated condition of the stomach which is produced by chronic irritation of these submucous glands usually extending over a considerable space, as may be observed in the case before us. The persons affected with simple ulcer of the stomach in these kingdoms are chiefly females; but in France the majority of the cases observed by Cruveilhier occurred in males. The complaint has not been found, in any instance, before the usual age of puberty; but a considerable proportion of the cases have been met with in women suffering from amenorrhœa emansionis, as in the present instance. The patients in almost every case were below the middle age.

The symptoms of ulcer of the stomach are usually those of common dyspepsia; but in several cases even these have been entirely absent. There can, therefore, be none which can be considered as pathognomonic; but those most usually present are, pain in the epigastrium and in the left hypochondrium, increased by pressure, and also on taking food, which is often rejected, at least in part. The pain and vomiting almost immediately succeed the entrance of the food into the stomach; but the latter stages of the digestive process are uninterrupted. Pain is also felt in many cases between the shoulders.

Such are the symptoms that ordinarily precede the rupture or perforation of the stomach by the ulcer; but the instant this has taken place, a burning pain is felt in the abdomen in a single spot, from which it radiates until it extends over the whole cavity, which becomes exquisitely tender to the touch. There is extreme depression, amounting to prostration of the vital powers; but syncope is not actually produced, though the pulse is very feeble. Vomiting is usually present from the first, but this symptom may be merely the effect of the sudden prostration. After a short interval some re-action occurs, and then we recognise the symptoms of most intense and acute peritonitis; but one symptom is present from the first, viz., the knees are drawn upwards to the abdomen, and the pain is increased by any attempt to straighten them, and extend the body. The abdomen is swollen and tense, but not always clear on percussion, as it may be dull from the amount of effusion, which takes place most rapidly. The patient is extremely restless, but perfectly rational, and often expresses a fear of death, which is usually verified in less than twenty-four hours from the commencement of the seizure. In some cases, however, the most urgent symptoms remit for a time, to be succeeded by another and fatal attack. In these instances adhesions of the viscera of the abdomen are found, which have precluded the escape of the contents of the stomach, and consequent extension of the inflammation.

In a few cases the ulceration corrodes the coats of one of the arteries of the stomach, and produces profuse hæmorrhage, which is ejected by vomiting, in the form of clots of blood, thus serving to distinguish cases of hæmatemesis, the result of ulceration, from that produced by sanguineous exudation from the mucous membrane, in which case the blood is darker in colour, and more fluid in consistence. From this symptom I was enabled to diagnose an ulcer in the stomach, in a case of fatal hæmatemesis.

It is a remarkable fact, that though the symp-

toms of perforation of the stomach are so strongly marked; yet, in very few cases do they appear to have been recognised previously to the death of the patient, consequently the treatment employed has usually been merely in palliation of the symptoms. From the success, however, that has attended more or less completely the treatment of cases of perforation of the intestines by opium, there is good ground for placing confidence in that rather than in any other of the remedies hitherto used. Purgatives, emetics, and aperient enemata, and all other remedies that excite the peristaltic action of the bowels, must be worse than useless, as the movements they occasion of the contents of the abdomen must have the effect of diffusing more widely the irritation produced by the effusion of the contents of the stomach. Opium has a directly opposite effect; it checks the vermicular motion of the bowels, while it supports the powers of nature until an exudation of lymph takes place, which glues the ulcer to the adjoining tissues, preventing the further escape of the contents of the stomach, and isolating the seat of the inflammation from the remainder of the peritoneal surface.

In cases where I have had reason to suspect the existence of an ulcer in the stomach, I have found a combination of tonics and astringents, with antacids and opiates, and giving very small quantities of the food most easily digested, whether animal or vegetable, fluid or solid, to have been most successful in allaying the symptoms.

Dr. Graves, of Dublin, has published two cases of the successful treatment of suspected perforation of the stomach by the use of opium.—*Clinical Medicine*: 2nd Edit.

The treatment by opium after perforation has taken place may be illustrated by the following case:—

Thomas Davies, aged 35, came under my care for acute inflammation of the larynx, January 13th, 1841. On the 17th he was much better; but, on the 18th, he was seized with pain in the right hypogastrium, attended with constipation, and distention of the bowels and vomiting. There was extreme tenderness on the slightest pressure over the affected part; his face was anxious, and he lay on his back with his knees drawn upwards. Suspecting a perforation of the intestines, as the pain had come on so suddenly, I ordered him calomel gr. v., op. gr. iss., to be taken every four hours. The next day the pain and tenderness were so much relieved, the expression of the features so natural, and the position of his limbs so easy, that I doubted the correctness of my diagnosis; and at night finding that the bowels were still confined, that the abdominal pains were not fixed, but moved about unattended with any tenderness on pressure, I ordered him a brisk aperient, which acted powerfully, bringing back the pain and all the former symptoms. I then resumed the opium, but the purging did not cease till the night of the 23rd, nor the vomiting till the 24th; he continued to sink, and died on the 26th, eight days after his first attack. It was not till the 23rd that I was told he had recently had an attack of fever.

On dissection, I found two perforations at the lower end of the ilium the sizes of a pea and a shilling, through which fæcal matter had escaped, and produced effusion of lymph as high as the liver. The stomach contained about a quart of matter having the colour and odour of fæces.

PRACTICAL CASES.

By THOMAS EDWARD AMYOT, Esq., M.R.C.S.E.

HÆMORRHAGIC DIATHESIS.

The two first cases I am about to relate are examples of the hæmorrhagic diathesis evidenced early in infancy, and the third is a fair sample of the vigour of an unimpaired constitution in the restoration of parts, even under very disadvantageous circumstances.

Case 1.—I was called to an infant five days old of rather weakly appearance, but who had not until now exhibited any decidedly unhealthy symptoms. I found hæmorrhage proceeding from the scrotum, and, as I then thought, from the wound of a pin. Some quantity of blood had been lost before my arrival, although various homely remedies had been applied. Cold, and some other means, however, at last succeeded; but, on visiting the little patient on the following day, I found that bleeding had taken place from the umbilicus, (the cord having separated shortly before,) and soon afterwards blood was seen oozing from the tongue, mouth, and gums, and was thrown plentifully from the stomach. It was also discharged from the bowel, sometimes pretty fresh-coloured, and sometimes dark and offensive; and whenever the surface was touched, or pressed ever so lightly, an ecchymosis followed. Alum, matico, and catechu were used, but in vain, and the infant died about seven days from the first hæmorrhagic symptom. I had no opportunity of examining the body. I should add, that the father is a healthy young man and the mother rather delicate,—neither of them disposed to hæmorrhage.

Case 2.—An infant had been suffering from bronchitis, and in the course of the treatment I had occasion to lance the gums freely; the hæmorrhage from them continued for about twenty-four hours, when I was sent for, and found from the clots thrown from the stomach and passed by the bowel, that it must have been very considerable. A saturated solution of alum was at first applied, but it greatly increased the mischief, so that the blood ran freely; but the tinct. ferri sesquichlor., laid on with a feather, was immediately successful. The child was very pale and quite exhausted; but, childlike, soon rallied and recovered. Now, this infant was a female, but the frequency of hæmorrhage in *male children* is worthy of remark. I would refer the curious in this matter to two papers, the one in the 12th Vol. of the "Medical Chirurgical Transactions;" the other in the 19th Vol. of "Braithwaite's Retrospect," (extracted from the *Medical Gazette*,) in which the occurrence of umbilical hæmorrhage in *four male* infants of one family is related by Mr. Edward Ray.

Case 3.—I was called to attend an infant three days old, whose scalp had been frightfully lacerated by the extreme violence of the woman who attended at the confinement. The injury extended from just above the outer angle of the left-eye at first, upwards and backwards, and then directly across the parietal bones to behind and below the right-ear, measuring, I should think, seven inches in length. It had been roughly sewed up with a large needle and very coarse brown thread (or rather twine) by the midwife directly after birth. The child now refused food, and appeared in a declining condition. I removed the suture, and merely applied some strapping-plaster, fully expecting that the profuse purulent discharge which was even now beginning would exhaust my young patient. The wound, however, healed most kindly by granulation.

Diss, Norfolk, June 1850.

HOSPITAL REPORTS.

KING'S COLLEGE HOSPITAL.

FEMORAL HERNIA IN A VERY CORPULENT WOMAN—

OPERATION—SUBSEQUENT SLOUGHING OF THE INTESTINE—ARTIFICIAL ANUS—DEATH AFTER SIX WEEKS.

There have been several cases of strangulated hernia in this hospital lately, which have required operation, and to one of these more particularly are attached such features of interest, that we shall give a sketch of it from the commencement. The patient was admitted into the hospital on the 16th of April, with a hernia in a state of strangulation. It appears that she had only perceived the existence of a rupture six weeks before, her attention having at that time been called to a small swelling in her groin. Two days before her admission the hernia became strangulated, and her symptoms increased in severity until the day of her entry, when she was suffering very much. There was constant vomiting. The woman was between 50 and 60 years of age, and enormously corpulent, consequently by no means a promising subject for any operative proceeding. Mr. Bowman, who had charge of this patient, attempted with care to relieve her by the taxis; but, as this made no impression, further delay was not permitted, and at three o'clock on the day of her admission she was carried into the theatre, and chloroform was given to her. On exposing the tumour, it was so very large and prominent, and it was so nearly situated in the inguinal region, that it was impossible to state with correctness as to its precise nature, *i. e.*, whether it were femoral or inguinal. Mr. Bowman having cut through the immense layer of adipose tissue, and having carefully divided the superficial layers of fasciæ, was able to determine as to the hernia being seated in the femoral ring. On the parts above mentioned being divided, what appeared to be the hernial tumour came into view, being separated into two portions by a strong band of fascia; but, on cutting through this, what was thought to be the hernia was a large mass of fat, much congested, and altered from its natural appearance, whilst the sac and its contents lay under, or rather above, the band of fascia mentioned. This being reached, was cautiously cut into, and a very large quantity of bloody serum was evacuated. The intestine which was strangulated was a part of the ilium, so congested that it was of a complete chocolate colour, but, on examination, it was found to be, in other respects, quite healthy; it was slightly adherent to the neck of the sac, but, on the division of Gimbernat's ligament, it was readily returned.

This patient continued in a pretty satisfactory condition for the first few days after the operation, although the constitutional irritation was somewhat severe. At the end of this period, however, the sac of the hernia took on the sloughing process, although no other portion of the wound, nor the tissues around, were in an unhealthy condition.

April 27.—During the last two or three days fæcal matter has been found to be coming from the wound made during the operation, and a portion of the intestine is seen lying in the wound in a gangrenous state. The general condition of the patient is much the same as it has been; the pulse is feeble, and the tongue is much furred; she takes her food, which consists of stimulants and nutritious broths, without producing any vomiting.

May 2.—The last few days this patient has been in a very unsatisfactory state; she has been harassed with a troublesome cough, and she has had some vomiting at times; she now lies in a dozing condition most of the day, but she does not get sleep at night. As regards the wound, the sloughing is still going on, and a considerable quantity of fæculent matter comes away from it; the tongue is dry and furred; pulse 120; very small and feeble. The main part of the treatment consists in giving a liberal amount of stimuli and nutritious fluids; and keeping the wound very clean.

7th.—The slough, consisting of the sac, has entirely separated from the wound, which is now beginning to granulate. Much less fæcal matter comes away from the wound—most coming through the natural passage; the patient is still much depressed; the pulse is weak and frequent; but the tongue is moist and much less furred; and she has been able to take some solid food without vomiting. She is ordered to continue her wine, and to have a mutton chop.

10th.—This woman is in a more satisfactory condition, although she lies most of the time in a low apathetic way; the wound is granulating well, but a large quantity of fæcal matter comes away from it, and scarcely any by the rectum.

15th.—The state of this patient remains much the same as before; if anything, she is lower, and she lies in the same dozing condition; her pulse is very small and feeble, and the face is somewhat dusky. She is able to take her nourishment; does not vomit.

25th.—This woman still continues in a curious condition. Since the last report her health has fluctuated much; for a few days she was very low, and appeared likely to sink; but, lately, she has improved again; her tongue has become cleaner; she takes her nourishment well, and the countenance is more cheerful. As the fæces almost entirely came by the artificial anus, and the opening in the intestine appeared to be valvular, Mr. Bowman tried pressure upon the upper lip of the wound; and this appeared to be of some service, as hardly any fæcal matter came away; but, at the end of two or three days vomiting occurred, and it was

found needful to remit the pressure. At this period, however, less fæces came through the opening, and more by the rectum. Her state really holds out some hopes of eventual recovery, although she is visibly declining much in flesh. She is taking chiefly a large quantity of stimulants,—wine and gin.

June 1.—Since the last report this patient again declined; her depression became more marked; there were no symptoms, however, of mischief in any organ, and none denoting inflammation; the pulse continued feeble, between 90 and 100; the tongue remained furred and dry; vomiting occurred at intervals. Some of the fæces came by the wound, some by the rectum. A large quantity of stimuli were given to her to support her, but she gradually got lower, and died on the last evening.

On *post-mortem* examination there was nothing particular found to account for death, and it was evident that the patient died from simple exhaustion. There was some slight effusion of lymph on the peritoneal surface of the intestines. On looking at the artificial opening, a beautiful specimen of what nature does to repair mischief from disease or injury was seen. A portion of the intestine (the ilium) which had been opened by ulceration, was in firm connexion by adhesive deposits to the orifice in the inner surface of the abdominal wall, so that no escape of fæcal matter whatever could occur into the general cavity of the abdomen.

In almost every case of strangulated hernia, one may learn something new, and, although there appears to be room for but little variety in this disease, yet the surgeon is constantly seeing cases which differ much from each other, and which present some peculiarities not frequently met with. The more we see this affection the more are we impressed with this fact, and we believe the relation of cases of hernia to be on this account particularly interesting and useful to the practitioner. In the one above narrated, there were features of interest both connected with the operative proceeding itself and also attached to the subsequent progress of the patient. It has been seen, that in the operation itself a peculiarity was met with: a large mass of fat, situated in the fascia, was so much changed from its natural appearance, that it looked exactly like the hernial tumour itself; and it was not until after some cautious dissection that the operator discovered its real nature. Mr. Bowman alluded to this at the time, and stated to the pupils that the peculiar appearance of this portion of fat had misled him at first, and that it was very likely to deceive an operator who might suppose that it was the protrusion itself, and, consequently, spend much time in cautious dissection. He stated, that in this case the fatty mass was one of the pellets which are found in the fascia of the inguinal region, much enlarged and congested, and hence its resemblance to the protruded bowel.

This case also shows to what an extent the surgeon may be of use in his interference, and what strenuous efforts Nature makes for the purpose of repairing the mischief which occurs after an operation for hernia. Although death ultimately ensued, yet life was prolonged by the operative proceeding for upwards of six weeks, when otherwise death must necessarily have happened long before, and there is every reason to believe, that had the patient been a more favourable subject, the ultimate termination would have been successful, for she died from simple exhaustion, at least chiefly from that cause. But the woman was aged and excessively corpulent, two circumstances, taken together, very unfavourable to a happy result after any severe operation, and more particularly so after the operation for strangulated hernia. Nature had done her part of the work most admirably after the intestine had unfortunately been opened by sloughing, in so firmly attaching it to the edges of the wound in the integuments, that no extravasation of fæcal matter could take place into the abdomen, and a free outlet externally for the contents of the intestine was obtained. The treatment of the case after the artificial anus had been formed, consisted mainly in supporting the vital powers of the patient, which became so much exhausted, from the constant discharge of the contents of the small intestines, which contain a large quantity of nutrient material. This should be the main object in such a case, and the nourishment, as in the one under notice, should be chiefly fluid, especially if the efforts of the surgeon are more particularly directed to closing the opening, as there will be less discharge from it than if the ingesta were solid and less easy of absorption. Peyronie, in his observations on hernia with gangrene, has especially noticed the importance of this, and has illustrated it, by the relation of a case in which "the wound continued to close from day to day, but more or less according to the quantity of diet the patient used. When he increased his food the wound opened, and gave out more matter and fæces; when he decreased the quantity, the wound contracted and furnished less matter of any kind; at last he was only cured after four months, and after having been reduced for about three weeks to *very light and digestible food*, and small in quantity."

LONDON HOSPITAL.

AMPUTATION OF THE LEG.

The patient, a sailor who had just returned from sea, was admitted into the hospital, under Mr. Carling, for a very large spreading ulcer, occupying nearly the whole of the lower two-thirds of the leg, the edges being separated behind only by a thin strip of healthy skin. On his admission, the surface was very foul, and discharged a large quantity of extremely fetid pus. The man's health, though impaired by the constant drain upon his system, yet remained tolerably good.

Mr. Curling observed, that from the great extent to which the ulcerative process had proceeded, he had little hope of effecting its cure, and if indeed its healing could be produced by long-continued rest and mechanical support, yet as soon as the man resumed his occupation, the newly formed tissue would again rapidly undergo the process of ulceration. Under these circumstances he therefore recommended the removal of the leg, which was accordingly done by him, below the knee, on Thursday, the 2nd instant, by the flap operation, whilst the patient was under the influence of chloroform and ether, a mixture of equal parts being employed.

This is the second case which has lately occurred in this hospital where it has been found requisite to amputate in consequence of large incurable ulcers. The other patient is still in the hospital, and is under the care of Mr. Luke. In both instances the greater part of the flaps have healed by the first intention.

VIOLENT STRAIN OF THE BODY GENERALLY.

A well marked instance of this kind has lately occurred in the Hospital, in a short and extremely muscular man, a porter, who was admitted under Mr. Carling, having a short time previously been obliged to support for several minutes a cart-load of hay, weighing 18 cwt., in order to save himself from being crushed by the weight above him.

When brought here, he could scarcely move any of his limbs, and complained of violent pain over the whole of his body, more especially in the abdominal walls and in his legs and joints.

His face was puffy and injected, and his eyes ecchymosed so as almost to conceal the sclerotic.

The integuments over the deltoid and pectoral muscles were also ecchymosed, and there were several lines across his abdomen.

By perfect rest, attention to diet, and opiates to allay pain, the effects of the strain gradually subsided, and the patient, by the end of three weeks, was enabled to leave the hospital, complaining only of weakness and stiffness of his limbs.

The violent exertion of the muscles had caused rupture of some of the fibres, and cutaneous capillaries likewise to give way, and in this way the ecchymosis may be explained.

The injury, taken in connexion with the strain upon the ligaments, &c., necessarily arising from the great exertion, fully account for the lengthened period of repose which was required, in order that the nutritive processes might compensate for the injury which those structures had sustained.

The British Association will meet at Edinburgh July 31, under the presidency of Sir David Brewster.

PROGRESS OF MEDICAL SCIENCE.

FRANCE.

[Paris Correspondence.]

RE-OPENING OF THE SCHOOLS.

The return of the fine season has brought with it the usual re-opening of the summer courses. M. Cazenave has resumed his excellent lectures on diseases of the skin, at St. Louis; and Ricord his clinical conferences on syphilis, at the Hôpital du Midi. M. Becquerel, jun., is also delivering a very useful and instructive course of lectures on Hygiene. Indeed, great attention to this important, though long-neglected branch of the healing art, appears to have been excited at the present moment, whether from the late prevalence and expected recurrence of cholera, or from popular necessities, I cannot say. At the Palais National, the Conservatoire, the Ecole Centrale, and many other public establishments, we have now popular lectures on public and private hygiene, which are attended by the working classes with the greatest assiduity. Man is thus taught the better part of medicine—the way to avoid disease. Would it not be desirable that a practice in every way so worthy of imitation should find followers in our own country? Capability of imparting knowledge is not wanting amongst our junior practitioners, and the diffusion of popular instruction on the means of preserving health would assuredly be a more useful and honourable mode of acquiring fame than the doubtful expedient of self-supporting dispensaries.

PRECISE SEAT OF FECUNDATION.

At the last meeting of the Academy of Sciences, M. Coste read an interesting note on a point of physiology which, for many years, we have been accustomed to regard as settled. It has, in fact, been admitted by all modern physiologists, that fecundation of the ovum, in higher animals, may take place at any point of the afferent canal or of the uterus. M. Coste considers this opinion to be erroneous. In order that fecundation take place, it is evidently necessary that the ovum retain a perfect state of vitality when submitted to the influence of the fecundating fluid. But this state of integrity does not exist for ova found in the uterus or Fallopian tubes. This holds good for birds and the mammalia, at least. M. Coste has examined the bodies of females in these classes ten or twelve hours after the ova had passed into the afferent canals, and these unfecundated ova, even at that early period, were so far decomposed that the cicatricula and vitellus were manifestly deformed. Hence the Author concludes, "that since decomposition commences in the ova before they have traversed the first half of the afferent canal, fecundation can only take place above that point, viz., in the ovary, pavilion, or, perhaps, in the upper third of the oviduct."

NEW ANASTOMOSIS BETWEEN THE VENA PORTÆ AND THE INFERIOR CAVA.

M. Claude Bernard has discovered and described a new mode of anastomosis between the abdominal and general venous systems. This disposition was discovered in the liver of the horse. The porta and inferior cava, in that animal, are separated by the lobulus Spigelii, and it is at this point that the anastomosis now alluded to takes place. Oftentimes before, but generally soon after, it has entered the liver, the trunk of the vena porta gives off numerous branches, which accompany the cava for some time, and then anastomose with it in a very peculiar manner. At first sight they might be mistaken for a system of *vasa vasorum*; but further research shows that, instead of breaking up into capillaries, they suddenly dip into the cava and communicate with it. In other points, the branches unite to form a kind of ampulla which communicates directly with the cava vein. The anastomosing branches have no valves, and the communication takes place, in a very free manner, throughout the whole liver.

ANALYSIS OF THE BLOOD.

MM. Verdell and Dolfus are now engaged in a very elaborate series of experiments to determine the composition of the blood. They have commenced with bullock's blood, because enormous quantities of blood are required to be experimented on before the best process applicable to the determination of

each constituent can be discovered. As the labours of MM. Verdeil and Dolfus are far from drawing to a close, I shall merely now allude to one or two points already illustrated by them. When the albumen was separated in the ordinary manner, and precipitated by alcohol, it was re-dissolved in water and again precipitated by the acetate of lead. The fluid which remained being filtered and treated with the sub-acetate of lead, another precipitate was formed. This was a salt formed between the lead and a non-azotised organic acid, which appears to have considerable analogy with the acids derived from the oxidation of sugar. Sufficient of this new salt for analysis has not yet been obtained, but when burned it gives out a strong odour of caramel. In addition to the above, the authors have found a considerable quantity of hippuric acid in the blood of the ox. It was obtained in a pure crystallized state; but the urea must be previously removed, and to effect this very great care and nicety are required.

BROMIDE OF POTASSIUM.

At a period when the high price of iodine rendered it almost impossible to employ that remedy in hospital practice, several efforts were made to substitute for it the bromide of potassium, and recently some have gone so far as to hint, that it may prove an anæsthetic agent nearly as powerful as ether. M. Huette published an excellent Memoir on this remedy in the last Number of the *Gazette Médicale*, from which we learn, that, although the alterative properties of the bromide cannot be depended on, it possesses narcotic powers of a very peculiar and energetic kind. The influence of these latter seldom appears until patients have taken from three to five ounces of the remedy, in doses gradually increased from two to twenty scruples, within a period of fifteen days.

A dull headache is the first effect, and the peculiar stupor, with an irresistible tendency to sleep, soon follows. This is interrupted by a strange kind of delirium, very different from that produced by any other narcotic. It resembles the stupid incoherence of idiocy, and is occasionally mixed with hallucinations. The muscular strength now rapidly gives way, and with it the general sensibility. The latter effect, however, is very seldom carried to any considerable degree, and the cases in which the bromide causes sufficient insensibility to admit of surgical operations being performed without pain are extremely rare. It cannot, therefore, replace ether or chloroform. The stupor and insensibility now described continue as long as the use of the remedy; but the functions of organic life are not troubled, and the effects rapidly disappear under the use of purgatives, or as soon as the use of the bromide is suspended. In this respect, its action resembles that of Indian hemp. One peculiarity is worthy of special notice. Even in very small doses, it rapidly and completely annihilates the sensibility of the pharynx and velum palati to such a degree, that these parts may be tickled without exciting the least effort at deglutition. This property may, perhaps, be turned to practical account.

SCOTLAND.

[Edinburgh Correspondence.]

GREGORY'S EDITION OF REICHENBACH.

ODYLE.

Some speculation has been caused here by the recent appearance, under the auspices of an eminent Edinburgh Editor, of a translation of Baron von Reichenbach's researches on the new imponderable, which he terms "Odyle." By the same Editor, all that had then been published in Germany was brought out in an English dress in 1846. The German work is not yet finished, but the recent English publication includes a new edition of what appeared in 1846, as well as all that the Baron has since given to the world on the subject. And the great question with us now is, does the work deserve a serious examination? And be it remembered, the affirmative of this question implies not merely a deliberate study of what the book contains, but a careful application to its contents of the very first principles of the evidence of testimony in regard to allegations that cannot be tried by our personal experience. We are well satisfied of Reichenbach's just claim to a high reputation as a discoverer in chemistry, and we have as little doubt of his translator's (Professor Gregory) title to rank as an eminent chemist. Yet distinguished names have before now led the world astray, and it does not follow, that because individuals have shown great ability in experimental science, they are therefore trustworthy guides in cases where the evidence is wholly or chiefly moral in its character. There is nothing which the evidence of testimony is not competent to establish, except what involves an absolute contradiction. But the character of the testimony, and the whole circumstances attending it, must be very cogent when it asks belief for phenomena at variance with former experience, instead of merely seeking our assent to what readily coincides with the known course of nature. Baron von Reichenbach and his translator do not seem to have considered the matter in this, its proper light. They ask us to believe that certain individuals, and these chiefly of an excitable mental character, have the power, within the universal limits of distinct vision, to see a physical luminous agency, produced under certain variable conditions, which makes no impression on the visual organs of men in general. This is the Baron's new imponderable,—his so called Odyle, —among the sources of which are "magnets, crystals, the human body, the sun, the moon, the stars, heat, electricity, friction, chemical action, and the whole material universe." Of the quantity of evidence, or so called evidence, produced, there is no reason to complain, but its quality is hardly of a kind for our market. And it is this last circumstance which seems to give us the right to shut the book and refuse any further hearing to its statements. In a case where pretensions of this kind are put forward, we are entitled to expect some confession on the part of the author that there is such a thing as credulity in the world, and to see that in his investigations he has taken care to guard against its effects, both in himself and in the sensitive subjects of his observations and experiments. Instead of any case of this kind being manifest in the book, we find it everywhere abounding in such romance of statement as distinguishes the imitations of "The Mysteries of Udolpho." Dr. Gregory affirms, that Reichenbach's mode of investigation is the inductive method, "the same to which we owe all the progress of modern science." We could suggest an improvement on some of his experiments, which we think would bring them more nearly within the pale of inductive investigation. When the Baron finds, say an unexpected acid re-action developed in a chemical process, he does not content himself with merely using repeated slips of test paper to convince himself that, in the process believed to have been followed, such a re-action has arisen,—he repeats the process with new materials and new precautions against the presence of any before unsuspected element, and is only convinced when he has exhausted every possible source of chemical error. Let him borrow this mode of proceeding the next time Mademoiselle Reichel visits him at the Castle of Rusenberg, and consents to go in the dark to the churchyard of Grunsing. When she says she sees along one of the graves "a delicate breathing flame," let her not be taken to another grave where she might see "the same thing, only weaker;" for what is this second grave but a new test paper, when one is sufficient as regards her? but let her first description be taken down in writing in the most detailed manner, and then without delay let another sensitive (and it cannot be difficult to obtain one, since the Baron tells us that about one person in every three has this character), who has had no previous communication with her, be placed in exactly the same position, and let this sensitive's description be taken down in like manner. It is plain that the supplying of one sensitive after another, in quick succession, with as little change in the circumstances as possible, at the point chosen near the same grave, corresponds to the renewal of the materials and the performance of the operation anew in a chemical difficulty. The agent alleged to issue from the grave is a physical influence, and, if there be any truth in the Baron's discovery, the effect must be the same on the organs of the several sensitives. The point to be established is the existence in certain individuals of a power to see a species of light which the rest of men do not see. It is evident, then, that it is useless to multiply the experiments on one individual who cannot be proved to be trustworthy by any number of trials. In him the materials cannot be shown to be free from vitiation, except by the proof that a number of individuals are similarly affected by the self-same test, applied in exactly the same circumstances. This, as we think, is the true method of induction, as applied to the case. We recommend the Baron and his translator to consider the matter in this light, the philosophy of which we know they both understand far better than we can teach them. And we strongly advise them to cut out of their next publication on this subject all such tales as the following, of which there are too many in the book:—Pfeffel the poet was blind, and employed a young clergyman as his amanuensis. As the poet walked in his garden, holding the young man by the arm, he observed that, as often as they passed over a particular spot, the arm trembled. On being asked why, he at last confessed that he felt at that spot the kind of uneasiness which he knew indicated the presence of a human corpse. Pfeffel regarding this as a fancy, went with him to the garden, with the view of curing him. The young man would not go up to the place, but said he saw a luminous, ghost-like form floating over it, which represented a female form, with one arm laid across the body, the other hanging down; floating in the upright posture, but tranquil, the feet only a handbreadth or two from the soil. The poet went alone to the spot, and struck about in all directions with his stick without any other effect than would have been produced on a flame. The same trials were often repeated, during several months, and were witnessed by numerous companies of people. At last the poet had the place dug up, and at a considerable depth was found a firm layer of lime, and beneath this the bones of a human being. When the bones were removed, and the pit filled up, the ghost no longer appeared. What theory, however true, could stand against the smothering influence of stories like this? Who answers for the particulars? How does it happen that not one of the numerous companies who witnessed the repeated trials ever saw the ghost except the young clergyman? What became of the 33·3 per cent. of sensitives all the while? Till Reichenbach confesses that such stories as this furnish no proof of the existence of Odyle, most of us here are determined to keep his book shut. These stories could be furnished to order from almost any district of the country, and to almost any amount. A ludicrous proof of this occurred in Edinburgh soon after the translation of Reichenbach's first part was published. In an interesting paper on Spectral Illusions, read before the Medico-Chirurgical Society of Edinburgh by Dr. Robert Paterson, of Leith, he referred to the story just recounted from Reichenbach, when a gentleman who was present immediately produced a similar story from the annals of the neighbourhood. In the county of Fife, some twenty years ago, an apprentice murdered his master, and, after burying the body in the garden, gave out that his master had gone on one of his accustomed business journeys, and soon after left the place himself. As the master did not return in a few days, as was his custom, inquiries began to be made; and, in the meantime, a gentleman's servant riding past the man's garden in the night for the doctor to his mistress, thought he saw a light. On returning with the doctor he again saw the light, and pointed it out, but the doctor could see nothing. So persuaded, however, was the servant of the reality of what he had seen, that he gave information to the authorities, and they had the garden examined, and the result was the discovery of the murdered man's body at the place where the light was seen, and the subsequent apprehension and execution of the apprentice. Dr. Paterson, on publishing his paper in the *Edinburgh Quarterly Medical Journal*, introduced the story in a somewhat different form, as obtained from persons who professed to be acquainted with it. In the amended form the gentleman's servant becomes a clergyman, who, riding home with a friend, saw a phosphorescent light near the bottom of the garden, which his friend could not see, and a lady, who knew well the particulars of the story, always understood the light to have been like a white smoke rising over the spot where the body

that the symptoms observed in cases of fungus cerebri were those of inflammation of the brain or its membranes; that the pulse, though stated by Mr. Samuel Cooper to be very frequent in cases of this disease, will be found to vary with the seat, the degree, and the results of the inflammation with which it is associated. That the period at which the fungoid tumour appears will depend upon the occurrence, and upon the co-existence of granulation and inflammation. That those cases accompanied with hæmorrhage from the surface or into the structure of the tumour, and those in which the tumour appears to consist principally of coagulated blood, are attended with the most danger, not from any specific difference in the disease, but because those appearances are evidences of greater vascular excitement, or of more serious injury to the substance of the brain. Much importance was attached to the first management and treatment of compound fractures of the skull, complicated with laceration or injury of the substance of the brain. Every loose splinter, or fragment of bone, or other extraneous body, was recommended to be removed as completely but as carefully as possible, the author being of opinion that the many cases of recovery after extensive laceration of the brain, and even after the loss of considerable quantities of its substance, prove that the injury to the brain is less to be feared than the inflammation which may ensue, and which would be more likely to occur from the irritating presence of the foreign body, than from a slight additional injury inflicted in the attempt to remove it. These views were supported by references to cases reported by Dr. Hennen, Mr. G. Mallet, Mr. Pollock, and Mr. Harvey, seven cases in all, six of which proved fatal, from inflammation of the brain, and on dissection, splinters or spicula of bone were found imbedded in the brain. If inflammation of the brain and fungus cerebri supervene, the strictest antiphlogistic treatment, the exhibition of calomel, with or without opium, as the case may require, and the application of blisters to the nape of the neck, were the means of cure recommended to be put in practice. The only local application to the wound and protrusion to be dry lint covered with oiled silk, so as to allow of the assiduous use of refrigerants to the scalp. If, after all the symptoms of inflammation have subsided, the fungus should not decrease, in consequence of local want of action, as may be the case in strumous and enfeebled constitutions, a tonic system of treatment and gentle pressure upon the fungus would, it was suggested, prove beneficial. The Author concluded his paper by inquiring how the lost brain was restored in cases where portions of that organ have been destroyed, and by expressing his belief, that from the rapid growth of cerebral granulations, the loss of brain was replaced by the formation of new matter resembling it; and further, from the apparently trifling injury to the faculties in cases of recovery, even after the loss of brain has been considerable, it was at least probable that the new formation was capable of carrying on the functions of the original cerebral substance.

[To be continued.]

CORRESPONDENCE.

THE POOR-LAWS, THE UNION SURGEONS, AND THE POOR OF ENGLAND.

[To the Editor of the Medical Times.]

Sir,—"A looker-on" is usually supposed to see more of the actual state of the game than the players; and those residing far off may, perhaps, through "*the telescope of the Press*," be allowed to form as good an opinion of the real merits of the game as those absolutely engaged. It is impossible to peruse the pages of the *Medical Times* (to which the writer has been a *paid subscriber*, in Canada West, the land of his adoption, nearly from its commencement) without being forcibly struck with the *degraded* situation in which so many of our worthy and talented brethren of the Medical Profession of England have suffered themselves to be placed by the grinding and oppressive tyranny of the Poor-laws, as now administered by the "*notable Kings of Brentford*," in their Palace, or rather Star Chamber of Somerset-house, London, *and the Guardians of the Unions!!* The only wonder is, that they have submitted to such paltry and trumpery treatment so long. The very idea of gentlemen of the Profession accepting the paltry and inadequate salaries, varying from 15*l.* to 50*l.* per annum, for attending and administering medicines, &c., to say from 100 to 300 patients, within a circle or range of thirty miles. A Union-house, containing from 100 to 200 inmates, besides, is perfectly monstrous and incredible, together with a private practice into the bargain! This "*beats Banagher*" all to fiddle-strings! And how these are managed would, certes, "*puzzle a priest*" to understand! It is melancholy to reflect, that the *disunited state of the Profession*, where jealousy, suspicion, and all the common wants of charity exist, may be considered as the main cause which, for ages and generations past, has prevented *one of the noblest Professions* from reaping the reward it is entitled to! Why is it that we find so small a portion of these results among the members of the legal Profession? Simply this,—*they are united in one common bond!*—have certain regulations which they must obey, or become outcasts from the order, and shunned accordingly. Would that ours could be placed on a similar pedestal! Any surgeon undertaking the care of a large Poor-law Union must necessarily lose a large share of his private practice, and *wear himself down* in a very few years without benefiting his own coffers, denying himself nearly all the comforts, not touching the luxuries of life! He must be constantly in the saddle, exposed to all the vicissitudes of English climate, which, in a few years, tell so heavily on the strongest constitution, shorten the lives, or injure the health of so many Medical men; and for which, it is to be feared, there have been few opportunities of laying by a sufficiency to support declining strength and premature old age! Alas! that such things should be found *in merry Old England!* There is another most important class, to whom it is equally required to attend—*the poor themselves!* We cannot separate the hapless and melancholy situation to which, under Providence and *the blindness of Governments*—no matter whether Whig or Tory, both are blameable in the highest degree—they are reduced, from their Medical attendants; for, if the condition of one class is to be meliorated, the other must not be neglected. While reading the statements of the different Surgeons, in the distressing accounts they bring before the public, of the ungentlemanly and coarse manner in which they are treated by the Guardians and others, and their miserable pittance of pay, the question arises—*Why do they not unite, and refuse to do the work?* It would almost seem that the actual poor are quite overlooked! A miserable pittance is doled out to the famishing creatures in out-door relief, who probably dwell, not live, say from five to ten miles from the overseer or manager. There is sickness in the wretched hovel requiring medical aid; to obtain this, some one must walk that distance to get an order for the Surgeon, who probably resides miles off, to attend; he trudges on, and, not finding him at home, has to follow, and then, wearied with fatigue, hunger, and cold, *must return for the medicines!!* Can it be possible, in this age of improvement and "*go a-head*," there should be found such detestable folly on the part of the Surgeon, and such cruelty to the poor, in Old England, famous for her inventions, skill, and generosity. Shame! shame! "Tell it not in Gath!"

In the United States and Canada they certainly manage matters better; in fact, the sending home for the medicines would never do. All those high-flown gentlemen who have tried to show off, inevitably fail, and this in a marvellously short time,—and right they should. In country practice, almost every doctor carries his dispensary with him. Formerly, a long-backed, long-legged, thin-bellied Yankee of the craft could be distinguished at a long distance on horseback, with saddle-bags containing "potions for man or beast," with all his implements for drawing a tooth or experimenting "*à la* Dr. Slop" under his seat! Civilization and luxury have made sad inroads on the practice, even in our day; he is rarely seen now without his sulky, buggy, or handsome covered carriage, dashing away at a slashing rate; in his driving-box or well he carries his dispensary, in a small carpet-bag or trunk; and, if on horseback, a small leather-case for the pocket. No matter the distance, he prescribes at once. What a saving of pain and misery to the patient, and what a saving of time, labour, and expense to the relatives and friends! In Canada West, the respectable part of the Profession generally include the charge for medicines in the fee for the visit or journey; an admirable plan for both parties, thus avoiding the necessity of "making a doctor's shop of the patient's belly;" but, where he meanly refuses to pay for visits and attendance, by all means "throw in the bark;" let him have more than enough; he deserves to be well physiced for his consummate folly and meanness! It is to be hoped the Medical Practitioners of the old country will adopt this mode, as so much superior, in every respect, to the common method; where, visiting a patient ten miles off, the sufferer has to wait the return of the second messenger for the medicines! The following hints are offered to the Profession for their consideration and action, viz.:—To relieve the Poor-law Surgeon from the tyrannous and oppressive manner in which he is compelled—by his own folly, in accepting the office under the "present *régime*"—to perform his duties to those placed under his charge, and to provide more effectually for the relief of the poor; receiving or requiring medical assistance and attendance, "be it enacted, &c.," that for each Union, there shall be one surgeon appointed, special, with one or more assistants if required, or partner, who shall devote his whole time and attention to the poor alone, shall have no private practice, shall have a list of the names given him, residences, &c.; shall have his horse and sulky, or buggy, duty free, in which he can carry all the drugs, chemicals, instruments, &c. &c., and be able to prescribe at once. Here will be an enormous amount of saving in drugs to the surgeon, and an immense saving of harrassment, fatigue, and wretchedness to the poor themselves, in tramping backwards and forwards for the physic. Surely this last is worth some consideration? Besides all these, last but not least, the saving of the abominable annoyance—after a hard day's ride, on mountain, valley, and on plain, "through thick and thin," drenched to the skin, wearied in body and mind—of compounding lotions, powders, pills, &c., for his patients, who ought to have been relieved hours before, could the medico-chirurgo only have the courage to cast aside the abominable and senseless pride of carrying his own physic! The writer looks back with horror and disgust on the slavery and drudgery he suffered for so many years of his hard-worked and miserably ill-requited life, as a General Practitioner at home, years ago, and which he would not return to for all the gold of California. "And be it enacted," the salary for the Poor-law Union shall be what a gentleman of our Profession should receive for his services!

Mem.: If left to the tender mercies of certain Poor-law Guardians, God help him! If to the consciences of the three kings, he is to be pitied, indeed. "In union there is strength!"

The tactics of the Medical Profession, in England, must undergo great, thorough, and Radical Reform, to place it on a sound foundation: if done, it will prosper and flourish; if not, it will only sink deeper and deeper in the slough of indolence and despair!

With a view of showing how far our neighbours of the United States are a-head of our grandiloquent country of wiseacres at home, as regards the Medical Profession, I quote from the Message of the Governor of New York, the Hon. Mr. Fish, whose views are in accordance with common sense; namely, "that the State is called upon to contribute its aid more efficiently than it has hitherto done, to advance the cause of Medical education!!"

The *Medical Times* of Feb. 9, contains the Editorial notice and the statement of the Deputation of the Poor-law Surgeons to the Medical Board; which shows some similar ideas, as expressed above, regarding private practice, &c. But what a picture does this show of unanimity, consistency, and firmness on the part of the surgeons of England; viz., "the readiness with which Medical men sought the appointments presented a formidable difficulty to further burthening the State in these times!!" Proh pudor! they deserve all they get

John Mewburn, Surgeon,
Danby-house, Stamford, near the Falls of Niagara.

MEDICAL ETHICS.

[To the Editor of the Medical Times.]

Sir,—I observe a letter in your number for June 8th on the subject of Medical Ethics, written by the author of the review on the same subject in a late number of the *British and Foreign Medico-Chirurgical Review*. In this letter the writer lays down the rules of etiquette to be observed in relation to homœopathic practitioners in a way that may possibly be correct, if the fact be as he supposes; but it by no means meets the question, as it often actually presents itself, *e. g.*, in my own case; and I beg, therefore, you will allow me to ask, through the medium of your columns, what I ought to do? Your correspondent says, "If a regularly educated and legally qualified practitioner publicly professes that he treats disease homœopathically, to the exclusion of all other methods of treatment, in virtue of that public profession he becomes a charlatan, and should be treated as such; consequently, he neither ought to be met in consultation nor associated with in attendance upon a case." Now I have made no other public profession than that of my graduation oath. It is true that in the great majority of cases I prescribe according to the homœopathic principle, but I do not deny the

efficacy or utility of other methods of administering medicines; and, whenever the occasion required, I would not hesitate to prescribe an emetic, a purgative, or a narcotic. I use stimulants in typhus, and cod-liver oil in suitable cases, in the same manner as the rest of the Profession. I admit the utility of blood-letting in many cases, and possibly its necessity in some. In short, I practise no method to the exclusion of the other methods, except in so far as that one may be considered to supersede other methods; in the same sense as a modern surgeon uses the ligature or torsion of the arteries as the mode of arresting hæmorrhage which supersedes the cautery, styptics, or boiling pitch, employed by the surgeon of former times. The former certainly cannot be said to use the ligature exclusively in any invidious sense. How, then, does your Correspondent's letter apply to me at all? If my neighbour calls me a homœopathist, how can I help it? Would it not be as just on my part to call him a counter-irritator, a cathartist, or a specificker, because he blisters, purges, or gives quinine, and then accuse him of exclusiveness because he employs these means in individual cases to the exclusion of some other mode incompatible with them for the time being? How, then, can I possibly be said to offend against the rules of Medical Ethics? Such an offence implies the doing of something immoral or ungentlemanly. Now it cannot, of course, be immoral or ungentlemanly, *per se*, to give aconite or bryony, in small frequently repeated doses, in pleurisy. But if I believe these remedies to be the best, it would unquestionably be both immoral and ungentlemanly in me to refuse to give them, even at the risk of being called a Homœopathist, and thus offending against the rules of Medical Ethics as they are laid down by your correspondent.

As I am anxious equally for the honour of the Profession and the advancement of science, I feel painfully the dilemma in which I am placed, and I trust that your Correspondent will give me the benefit of his advice.

ONE WHO IS CALLED A HOMÆOPATHIST.

[To elicit opinions, we invite replies from our readers to the above.—ED. *Medical Times*.]

PLACENTA PRÆVIA.—ERRATUM.

[To the Editor of the Medical Times.]

SIR,—Will you allow me to correct a statement contained in my communication of last week. I therein observed, that nine cases of placenta prævia had occurred in my own practice, wherein the placenta had been separated previously to the birth of the child; and that "eight of these women recovered." On re-examining my notes, I find, although one only died during, or rather immediately after, delivery, that two others lived for a week only—one sinking with symptoms of low fever; the other with muco-enteritis. These diseases could not be referred to the placental separation; nevertheless it cannot with fairness be stated, that the patients "recovered," and therefore I should be obliged by your publishing this note in your next Number.

Yours,

Finsbury-square, 1850. CHAS. WALLER.

HEALTH OF LONDON DURING THE WEEK, ENDING JUNE 15.

In the week ending last Saturday the deaths registered in the metropolitan districts were 800. Taking the ten corresponding weeks of 1840-9, it appears that the deaths were never lower than 750, which occurred in 1841, when the population was less than at present; and that they rose in 1848 to 1000. The average of the ten weeks is 851, or, raised in proportion to increase of population, 928; there was, therefore, a decrease last week on the corrected average amounting to 128. In the zymotic or epidemic class of diseases the deaths enumerated were 167; and of special complaints which it comprises, small-pox was fatal to 9 children, and scarlatina to 19, both still considerably under the average; measles was fatal to 20, and hooping-cough to 30, both of which are near the usual amount. Typhus, on the other hand, seems to prevail more fatally; in the last three weeks it carried off successively 26, 39, and 43 persons, and has now risen rather above the average of the ten corresponding weeks, in which it varied from 17 to 69. One person died of ague, and 2 of remittent fever; 2 of influenza, and 1 of purpura. One death occurred from cholera, and 18 from diarrhœa and dysentery. This is not quite equal to the number registered in the same week of 1847-9. In the corresponding week of last year 38 deaths occurred from the two complaints; and at the same time 42 were caused by cholera. On the 10th of June, at 5, Britannia-gardens, St. Mary, Marylebone, the widow of a labourer died from "decay of nature," after having lived, if such statements, without the corroboration of registers of births or baptisms, can be credited, to the extraordinary age of 110 years and 5 months. Her name was Catharine O'Flaherty; she was a native of Claymorris, of the county of Mayo, in Ireland, and "continued (adds Mr. Martin, the registrar) in full possession of her faculties, and two days before death could thread a needle without the aid of spectacles."

The deaths in the several hospitals of London occurred as follow:—

GENERAL.		Sussex & Brandenburgh-house (Fulham) ...	0
St. George	1	Northumberland-house	0
Westminster	5	Whitmore House ...	0
Grey Coat Hospital ...	0	Pembroke House ...	0
Charing-cross	0	St. Luke	0
Middlesex...	5	Miles'	0
University College ...	4	Warburton's	0
Royal Free Hospital ...	0	Lunatic Asylum, Bow ...	0
King's College	4	Bethlem	0
St. Luke, City-road ...	0	Lunatic Asylum, Brixton	0
St. Bartholomew... ...	3	Retreat, Clapham ...	0
London	4	York House, Battersea ...	0
Guy's	15	New County, Wandsworth	0
St. Thomas	3	Peckham House ...	0
Bethlem, London-road...	0	Camberwell House ...	1
FOR CONVICTS.		LYING-IN.	
Hospital Ship, Unité ...	0	Queen Charlotte's ...	0
Penitentiary Hospital, Millbank	0	British	0
MILITARY AND NAVAL.		City of London	0
Royal Hospital, Chelsea (South)	1	Hospital, York road, Waterloo 2nd part ...	0
Royal Hospital, Greenwich (East)	2	FOR PARTICULAR CLASSES.	
Royal Military Asylum	0	Female Servant Invalid Asy., Stoke Newington	0
Coldstream Guards Hos.	0	German Hospital... ...	0
Grenadier Guards' Hospital	0	French Hospital	0
Scots Fusilier Guards ...	0	Portuguese Jews' Hospital	0
Royal Ordnance	2	German Jews' Hospital	0
Dreadnought Ship ...	0	FOR SPECIAL DISEASES.	
LUNATIC.		Small Pox...	0
Kensington House ...	0	Fever Hospital	5
Munster-house (Fulham)	0	Lock	0
Normand-house (Fulham)	0	Consumption, Brompton	0
Otto-house (Fulham) ...	0	Opthalmic, Charing Cross	0
Blacklands-house ...	0		

TOTAL, 55.

MORTALITY TABLE.

Deaths in the Week ending Saturday, June 15, 1850.

(Metropolis.)

CAUSES OF DEATH.	Total.	Average of Ten Weeks.
ALL CAUSES	860	851
SPECIFIED CAUSES	799	846
Zymotic (or Epidemic, Endemic, and Contagious) Diseases	167	174
SPORADIC DISEASES:		
Dropsy, Cancer and other Diseases of uncertain or variable seat	36	50
Tubercular Diseases	163	191
Diseases of the Brain, Spinal Marrow, Nerves, and Senses	91	109
Diseases of the Heart and Blood-vessels	39	26
Diseases of the Lungs, and of the other Organs of Respiration	92	96
Diseases of the Stomach, Liver, and other Organs of Digestion	55	51
Diseases of the Kidneys, &c.	11	8
Childbirth, Diseases of the Uterus, &c.	15	9
Rheumatism, Diseases of the Bones, Joints &c.	5	6
Diseases of the Skin, Cellular Tissue, &c.	1	1
Malformations	3	2
Premature Birth and Debility	29	21
Atrophy	9	12
Age	35	45
Sudden	13	11
Violence, Privation, Cold, and Intemperance	32	29
Causes not Specified	1	5

The following is the number of Deaths occurring from some of the more important special causes:—

Apoplexy	13	Heart	33	Phthisis	129
Bronchitis ...	39	Hooping-cough	30	Pneumonia ...	39
Cholera.....	1	Hydrocephalus	13	Scarlatina	19
Childbirth	4	Influenza	2	Small-pox	9
Convulsions...	34	Liver	7	Stomach	4
Diarrhœa	17	Lungs	6	Teething	11
Dropsy	15	Measles	20	Typhus	43
Erysipelas ...	5	Paralysis	13	Uterus	

BIRTHS AND DEATHS.

	Births.	Deaths.	Births over Deaths.
Males	688	405	283
Females	572	395	177
Total.....	1260	800	460

METEOROLOGY OF THE WEEK.

Day.	Mean of Barometer.	Mean of Thermometer. Dry.	Ditto. Dew Point.	Difference between the Mean Temperature of the day and the same day on an average of 7 years.	General Direction of Wind. A.M.	General Direction of Wind. P.M.	Rain in Inches.	Amount of Horizontal Movement of the Air.	Electricity.*
								Miles.	
Sunday	30·059	59·1	49·7	+ 0·4	S.W.	S.W.	0·00	70	Positive, and tension moderate at 9h. p.m.
Monday.....	29·910	62·9	50·0	+ 3·9	S.W.	S. & E.	0·00	65	Positive, and tension variable between noon and 3h. p.m.
Tuesday....	29·739	67·3	54·6	+ 7·8	E. & W.	W.	0·00	135	Positive and tension strong between noon and 3h. p.m.
Wednesday.	29·672	58·9	51·5	— 1·8	S.W.	S.W.	0·00	215	Nothing was shown throughout the day.
Thursday...	29·585	57·1	45·5	— 3·9	W.S.W.	W.S.W.	0·02	180	P. and N. frequently during morning; volleys of sparks and galvanic currents shown.
Friday	29·438	52·2	50·8	— 8·9	S.W. & N.	S.W.	0·15	230	Nothing was shown throughout the day.
Saturday ...	29·542	48·5	45·1	— 12·7	S.W. & N.	N.N.E.	0·02	20	Between noon & 1h. p.m., moderate N. electricity; at the other times of examination nothing.
Means ...	29·702	58·0	49·6	— 2·2	S.W.		SUM 0·19	SUM 915	

*In this Column, A. stands for Active; N. for Negative; and P. for Positive.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at the meeting of the Court of Examiners on the 14th instant:—Messrs. Jonathan Colmer Williams, South Brent, Somerset; Andrew Graves Power, Dublin; Elijah James Pring, Dublin; Walter Acton, Leicester; Thomas Joseph Lythe, Manchester; Horatio George Anthony Wright, Stockwell, Surrey; Joseph Bowmer, Draycott, Derbyshire; James Parker, Aughton, Lancashire; Stephen Massett Webb, Albion-road, Holloway; and George Forster Burder, Clifton, Gloucestershire.

APOTHECARIES' HALL.—Names of gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, June 13th, 1850:—Charles Welch, Cambridge-road, Mile End; Henry Edwin Sargent, Bottonet, Lizard, Cornwall; James Weston Combs, London; Robert Beales, Leicester; Nathaniel Crisp, Bristol.

NAVAL APPOINTMENTS.—James Wilson (*b*) borne on the books of the Saturn, Pembroke, for service in the Prospero steamer, to Sheerness dockyard.

THE COLLEGE ELECTION.—The Council of the Royal College of Surgeons have just announced that, on Thursday, the 4th day of July next, the Fellows will meet in the hall for the election of three gentlemen from among themselves into the Council. Messrs. Grainger and Pilcher, who retire in rotation, are, however, eligible for re-election. Appended to the notice summoning the attendance of the Fellows,

is a resolution of the Council, to the effect, that a statement having been made by certain members, that they had received and seen letters requesting the votes of Fellows of the College in favour of a gentleman said to be a candidate for the office of Member of the Council, it was "Resolved: That such canvassing is derogatory to the character of the College, and is calculated to defeat the legitimate object of the election."

THE FELLOWSHIP.—Notice has just been given by the Council of the Royal College of Surgeons, that those gentlemen whose diplomas bear date subsequent to July, 1842, and who intend presenting themselves as candidates for the Fellowship in August next, must undergo their examination in classics, mathematics, and French, on the 5th of July next.—(See advertisement).

OBITUARY.—On the 9th inst., at Norwich, John Green Crosse, M.D., F.R.C.S., Senior Surgeon to the Norfolk and Norwich Hospital, and one of the Vice-Presidents of the Provincial Medical and Surgical Association. Mr. Crosse was well known to the Profession as a most scientific and successful lithotomist.—Dec. 25, 1849, at Geelong, Australia, on board the Abberton, Charles Jennings, Esq., Surgeon, aged 24.—On the 2nd inst., at 7, South Gray-street, Newington, W. Forrester Bow, M.D., formerly of Alnwick.—On the 11th inst., at Aberdeen, N.B., Dr. Philip Tydiman, of Charleston, South Carolina, aged 73.—On the 15th inst., at Balham-hill, S. K. Parson, Esq., Assistant-Surgeon, H.E.I.C.S., aged 38. On the 13th inst., at Calais, Dr. Kirby, aged 76. He was at the battles of Salamanca and Waterloo. On the 16th inst., in London, Richard Hennard, M.D., of West Malling, Kent, in the 63rd year of his age.

FEMALE ORPHAN ASYLUM.—Yesterday their Royal Highnesses the Duke of Cambridge and Prince George of Cambridge attended the anniversary at the Female Orphan Asylum, Lambeth. Prayers were read by the Rev. Mr. Cattley, the chaplain, and the sermon was preached by the Venerable the Master of the Temple. A hundred and sixty orphan girls joined in the singing and responses; and their Royal Highnesses manifested the greatest interest in the result of the recent election, last Monday, of 15 orphan children, when, out of 29 candidates, the 15 successful competitors polled more than 29,000 votes. The collection amounted to 58*l.*

THE SALARY OF MR. CHALMERS, one of the Surgeons to the West Derby Union has been reduced by the Board of Guardians from 80*l.* a-year to 60*l.* Will the Poor-law Board sanction this? Union Medical Officers are rarely overpaid.

THE small-pox has made great ravages among the children at St. Helen's, Liverpool, very few of them having been vaccinated, owing to maternal prejudices.

MR. SMITH, of Deanston, one of the Sanitary Commissioners, but better known as an agriculturist, was recently found dead in his bed. We trust that the vacant Commissionership will be given to a member of the Medical Profession.

AMPUTATION OF THE LEG has been recently performed on a leopard or cheetah, while under the influence of chloroform. The operation was performed by Mr. Simmonds, on account of a compound fracture of the leg.

EXETER.—A letter was sent to the Board of Guardians by Mr. Gillard, medical officer of Newton, complaining that his application for remuneration for services during the cholera had been rejected, although he had been promised remuneration at the time. The Board refused to entertain the question. Were the cholera to recur, these mean-hearted men would look very foolish if Mr. Gillard were to refuse his services. The proceedings of the Boards of Guardians, are generally very sickening. It would almost seem as if the Boards of Guardians seriously believed that medical men connected with Unions were overpaid, so often do we hear of reduction of their salaries. The great men, "great in their own conceit," of St. Thomas' Union, Exeter, propose to carry out this principle, and reduce the salary of the house-surgeon by 10 per cent. It is high time that the medical officers bestirred themselves, and that actively, or else they will soon be deprived of their salaries altogether, perhaps on the plea alleged by one of these Boards for not paying their medical officer for his extra services during the cholera, that "the extra practice and knowledge he obtained was sufficient remuneration." In the Dorchester Union the salaries of the medical men have been reduced 15 per cent. The plan *seems quite* systematic.

CONGENITAL ABSENCE OF THE STERNUM.—Dr. Chowne exhibited lately to the Westminster Medical Society a youth, seventeen years of age, small and thin, and in delicate health, in whom there existed a peculiar congenital malformation. The lad was a German by birth, a patient at the German hospital under Dr. Swayne, by whose kindness Dr. Chowne was enabled to show him to the Society. On stripping, there was found a deficiency of the sternum to a very great extent, a very small portion of the bone existing at the lower end, and terminating in the xiphoid cartilage. The clavicles at their sternal ends, and the sternal portions of the ribs were free, and there existed in lieu of the sternum itself an unresisting depression, in which a large vessel, supposed by Dr. Chowne to be the pulmonary artery, could be seen pulsating. When the boy's shoulders were thrown back, the ends of the clavicles were separated to the extent of at least two inches: when, on the other hand, they were brought forwards, the sternal ends of those bones were nearly in contact. There could, of course, be no doubt, that the deficiency was congenital.

MODE OF DETECTING CHLOROFORM IN THE DEAD BODY.—Dr. Snow has employed a very ingenious apparatus for the detection of chloroform in the dead body. The method he practises is a modification of one recommended in the *Jour. de Chimie Méd.*, Mars, 1849. He placed the blood, or portion of viscus to be examined, in a glass flask, from which a tube proceeded, which was made red hot at some part of its course, and beyond this part moistened inside with a solution of nitrate of silver; heat was then applied to the flask by means of the chloride of calcium bath, and the vapour proceeding from the part under examination having to pass through the red-hot tube, any chloroform it might contain became decomposed, and the chlorine and hydrochloric acid gases being set free, combined with the silver, forming a precipitate of the chloride of that metal, which could be recognised by its appropriate tests. The process is one of extreme delicacy. He has been able to get a distinct precipitate from the hundredth part of a grain of chloroform when dissolved in a thousand grains of water. In the bodies of two kittens killed by chloroform he detected it distinctly for six successive days after their death, although the bodies were not protected from the air, and although the quantity of chloroform breathed by each kitten must have been less than one minim. The parts of these animals examined were the viscera of the chest and abdomen, the brains, and the muscles of the body and extremities. He also obtained a precipitate of chloride of silver on manipulating with some portions of muscle from the leg of a child amputated under the influence of chloroform at St. George's Hospital. Dr. Snow very carefully exposed to this process some portions of viscera of the woman lately found dead under mysteriouscircumstances in the Wandsworth-road, which had been furnished to him by Mr. J. Parrot, but he had been unable to detect the least trace of chloroform, and he therefore concluded that her death was not caused by that agent. The only substances which could yield chloride of silver by this method are Dutch liquid and some other bodies closely allied to chloroform in their composition and effects, none of which, however, are commonly kept on sale. The chlorides naturally existing in the human body cannot be decomposed at the heat to which they are exposed in this process. Where the part under examination does not become dry, but at the utmost only boils in its own moisture, Dr. Snow believes that the process is not liable to any fallacy or objection.

THE SALTS OF CARBONIC ACID.—Mr. N. Samuelson has experimented on some of the salts of carbonic acid. The precipitated carbonates were dried in *vacuo* over sulphuric acid previous to analysis. The results obtained were as follow:—

Carbonate of bismuth = $Bi\,O_3, CO_2$
— cadmium = $Cd\,O, CO_2$
— manganese = $Mn\,O, CO_2 + HO$
— nickel = $10\,Ni\,O, 7\,CO_2 + 30\,HO$
— cobalt = $7\,Co\,O, 3\,CO_2 + 7\,HO$
— chromium = $1\,Cr_2\,O_3, 2\,CO_2 + 7\,HO$
— uranium & ammonium = $\{U_2\,O_3, CO_2\} + \{2NH_4O, CO_2\} + 3\,HO$

TO CORRESPONDENTS.

Our friends must pardon us, if we condense many communications into the form of answers to Correspondents. For letters of interest to the Profession generally, we always endeavour to find a place; but those which are entirely of a personal character must be noticed or replied to in our column to Correspondents, and that as briefly as possible, since, in justice to our readers, one column is as much as we can afford for the purpose.

We have to request, that communications intended for the editorial department of this Journal, be addressed neither to the publisher nor to the printer, neither to Dr. this, nor to Mr. that, but directly to the Editor of the "Medical Times," care of Mr. Churchill, 46, Princes-street, Soho, London.

We have, on the part of the Proprietors, to thank many correspondents for the approbation they have expressed regarding the changes we have announced as about to take place in the New Series of the "Medical Times." For ourselves, also, we have to acknowledge with thankfulness the suggestions several valued friends have offered to us, concerning improvements they think may be effected in the editorial department. To these we will give our most earnest attention; and if it be possible to comply with what our friends point out to us as likely to be improvements and acceptable to the Profession, we shall gladly attend to wishes so kindly intimated.

We have observed the remarks to which "a Friend" alludes. Their writer seems to writhe like one of those decapitated cold-blooded reptiles, whose spasmodic contractions are the delight of excito-motory physiologists. As regards ourselves, their effect is like that of a spent rocket or a shooting star—the one leaves a shred of brown paper, the other a morsel of slime.

"An Admirer of the Foreign Quarterly."—We thank our correspondent for his kind commendations. Our accusation was definite, our proofs irrefragable, and the conclusion obvious. The writer of the article can find no answer, and no doubt feels his humiliating position. To be justly and undeniably accused of a fearful misrepresentation of the doctrines and literature of the Profession on questions touching its moral relations, and a gross outrage on its moral dignity, is, indeed, a heavy blow.

The Correspondent who inquires for some "ordinary means" of ascertaining the absence of lead poison from drinking water, must depend solely upon chemical examination. The sulphuretted hydrogen gas is the best test. It may be diffused in water, and kept in closely-stoppered bottles. Mr. J. B. Harrison has lately published a few pages on the subject—"The Contamination of Water by the Poison of lead,"—and to his little work we refer our Correspondent.

"X. Z." will find his paper at our publishers. It is absurd to talk of finite beings creating anything; but it is worse than absurd to talk of their creating that which has no existence.

"L., Birmingham."—It is of very little moment what it is called, so that you do not allow the name to circumscribe your ideas of its nature and office.

We believe "A. B." is right in his views. Herodotus tells us that the ancient Scythians were accustomed to increase the flow of milk from their mares by irritating the vagina.

"G. A., Belfast," will find the required information respecting the magnesian origin of goitre in Dr. Inglis's "Treatise on English Bronchocele," London, 1838; extracts from which are given in the "Provincial Medical Journal," of the 29th of last May.

"Sumbul."—Mr. Amyot, of Diss, in Norfolk, suggests, that the Indian remedy "sumbul" is very probably derived from some species of Pterocarpus, the Indian synonyme for which is "sundul." He thinks he has also seen it written "sunbul." The common red saunders wood, if rubbed, emits a smell very similar to the sumbul, although much less powerful. Dr. Granville considers it probable, that it is the product of an aquatic umbelliferous plant. We may take this opportunity of stating, that Messrs. Savory and Moore, of Bond-street, have on hand a quantity of "sumbul," both in its natural state and in the form of tincture. The Profession will do well to give it a trial, and communicate the result.

Our valued correspondent at Liverpool will, perhaps, develope more fully the plan he proposes for our consideration. We fear, that, unless it can be carried into effect in most of the chief towns of England, its value would be but little. We shall, however, be glad to hear again upon the subject, and to know from what localities the information can be regularly obtained.

"Studens" is wrong. The doctrine of the unity of organic structures is quite as ancient as the study of natural history. Aristotle was persuaded of its truth, and his classification of animals is founded very much on the data which it affords.

"An Inquirer into the truth or falsehood of Mesmerism."—Dr. Forbes' little work, to which we last week alluded, is almost entirely a reprint from the "London Medical Gazette," in which its contents were originally published. We hope the perusal of the exposures contained in Dr. Forbes's work may be useful to our Correspondent.

Dr. Prout.—We are happy to inform "X. Y. Z." that we have prepared a Memoir of this eminent physician. It will appear in the First Number of our New Series.

"W. S."—The article called "semola" is, it is said, manufactured from the best wheat, which is first thoroughly cleansed and ground, and the starch separated from it. It is a very good article of food for invalids.

"Mr. Jones."—We were aware that the paragraph respecting the dieting the medical officers of the Marylebone Infirmary, inserted in a recent number of this Journal, has been extensively noticed by our non-professional contemporaries, and the insulting, pauperising proceeding commented on in terms expressive of just indignation.

"W."—The tobacco question has been mooted often. We are of opinion that, used in moderation, a good cigar is a very good thing. At the same time, we do not wish to advise our Correspondent to follow Dr. Hennen's example, and smoke forty a-day.

"An Army Surgeon."—The Iron Duke would have been more attentive to the interests of military surgeons, had he ever required their aid in any of his numerous campaigns. Our Correspondent must wait for the redress of his grievances until there be another Pharaoh in Egypt.

ORIGINAL CONTRIBUTIONS.

SOME PRACTICAL OBSERVATIONS ON THE DISEASE USUALLY CALLED PUERPERAL FEVER.

By THOMAS LIGHTFOOT, M.D., M.R.C.S. Ed., Formerly Consulting Surgeon to the Nottingham Union Hospital.

Section I.

There is nothing more deserving the deepest consideration of Medical men than the obscurity which still prevails respecting the intimate nature and cure of a disease which all admit to be of a most formidable character. Since the publication of the celebrated work of Dr. Matthew Baillie, pathological anatomy has been esteemed by the Profession the key-stone of rational medicine, or, in other words, the morbid appearances found on dissection after death, constitute nearly all the real knowledge we possess on the nature of most diseases. They do not, it is true, of necessity, lead to a discovery of the remedial means; but that they greatly assist no one, I think, doubts. When a patient, after suffering from acute pain in the side, fever, with cough and a full and hard pulse, dies, notwithstanding the most active remedial depletory measures, and we inquire after death into the precise nature of the malady which has cut him off, what is it we expect to find? Do we not anticipate with a certainty the detecting the presence of the most unequivocal traces of inflammation of the lungs, or of their investing membrane, or of both? And are we not thus assured of the correctness of the view we have taken of the case, and of the treatment we have adopted? On the other hand, mark the obscurity, the doubt, the difficulties besetting the question as to the intimate nature of diseases, which either leave no morbid alteration of structure after death, or such appearances as are equivocal, or, by their trivial character, are manifestly inadequate to explain the cause of death.

Thus it is with fever, influenza, cholera, mania, nervous disorders generally, and many others, over whose intimate nature morbid anatomy has thrown no light. Now, how stands the question in respect of the fatal disease which it is my intention to describe? Are we to place it in the first or second of these categories? Is it a disease whose nature may be clearly elucidated by morbid anatomy? Or must we arrange it with those diseases of an obscure and unknown character, towards the treatment of which rational medicine affords but feeble aid? seeking in the vast field of empiricism for some specific remedy, or remedial means, between which and the disease there exists no relation discoverable by human reasoning. This is the chief question I mean to consider in this brief memoir; it includes, indeed, the whole inquiry, and amounts simply to this; in the disease called puerperal fever, morbid appearances are all but uniformly found after death, indicative of the most active inflammations in important organs; do these lesions of structure unveil to us the real nature of this disease or not? Do they lead to a rational mode of treatment? Those who have not deeply studied the history of puerperal fever will scarcely credit the contradictory views which have been from time to time put forth by the most distinguished men; nor is the question nearer a decision, as is shown by the inquiry instituted, as it were but the other day, in Vienna.

By these remarks I pretend not to censure any one. The subject is one of vast difficulty. No one can be more sensible of this than myself. I bring before the Profession my own thoughts, rather with a view of forcibly drawing its attention to it, than from any expectation of overcoming, by my own authority, any of the difficulties to which I have alluded. The order I mean to follow is this: I shall first carefully consider the import of the various names given to this fatal malady—for there is much in a name. I shall review the symptomatology of the disease. Thirdly, the morbid appearances discoverable in the body after death; their import and extent. Fourthly, the treatment. Some concluding remarks on the intimate nature of the disease, and on the question of contagion, will conclude the memoir.

To avoid all equivoque, it is perhaps right that I explain the meaning I venture to give to the terms "intimate nature of the disease." Many distinguished men have viewed the sanguineous effusions met with in the brains of those who have died of apoplexy, not as really constituting the disease in itself, but as a mere sequela of a peculiar condition of the nervous system. Now, if such a condition exists, though manifestly unknown to us, it yet constitutes the essential or real disease. The same remarks apply to other diseases, with this difference, that in some the morbid appearances are such as to lead to or to coincide with a rational and approved mode of cure; in others they do not. In scrofula, cancer, and in a host of malignant diseases, they do not; all is empirical. Under which head are we to arrange puerperal fever? Are we to view it in despite of the accumulated labours of the first pathological anatomists of the past and present century, as a disease, *sui generis*, intractable, irremediable? Or are we to claim for it a place in the class of diseases over which rational medicine may in time be expected to exercise an influence?

About one hundred and twenty-five years ago, the term "puerperal fever" was first introduced into medicine by Strother. Since that period, many attempts have been made to alter the designation of the disease, but without any success. These attempts have been naturally based on the peculiar views which, from time to time, were adopted, irrespective of its intimate nature. Some have called it puerperal peritonitis, assuming that to be true which a more extended pathology refuted, that an inflamed condition of the peritonæum constitutes the essence of the disease. This has been considered to have been the opinion of Mr. John Hunter, from a passage in a manuscript copy of his Lectures, quoted to me by a friend from recollection. His distinguished brother, Dr. William Hunter, was supposed to have adopted a similar view, for he says: "On examining the bodies of those who have died of puerperal fever, the viscera and other parts of the abdomen are found to be inflamed. There is a quantity of purulent matter in the cavity of the abdomen, and the intestines are all glued together." And such, no doubt, are the appearances to be found in most cases, sufficient in themselves, when present, to give rise to the most alarming symptoms, and to lead to a fatal termination.

But, more extended inquiries by those who have enjoyed a wider range of observation, or who may have looked more narrowly into the pathological condition of the organs after death, disprove the idea, (and with it the name derived from it,) that the peritonæum is always and of necessity implicated in puerperal fever. We are forced then to look for other names more expressive than that in common use. There is abundance, no doubt, beginning with "child-bed fever," which explains nothing; "peritoneal fever," a name really devoid of any meaning; "the epidemic disease of lying-in woman," a name excluding all sporadic cases; "malignant puerperal fever," a name derived from a peculiar character in the history of certain epidemics. Hypocrates, who viewed the disease as inflammation of the uterus, would no doubt have called it hysteritis, and this opinion is supported by a host of writers, extending from the father of medicine to Dr. Denman. This list includes the names of Van Swieten, Hoffman, Boerhaave, and others equally celebrated. Others have ascribed the symptoms to an inflamed condition of the omentum, but without altering the name introduced by Strother; whilst some distinguished men have viewed the disease as one *sui generis*, but have not ventured to alter its nomenclature. The terms putrid, complicated, malignant, bilious, have all been applied to it without in any way clearing up the obscurities, or giving to the disease a rational name.

A question here arises which embraces all; is the disease one or many? Is it uniform in its character? Do we include under the name hitherto adopted, viz., puerperal fever, one disease or many? This is the main question, which we are not yet prepared to answer. Eminent men assert, and yet not in so distinct a way as could be wished, that several diseases have been included under one name: they have, therefore, subdivided it, and spoken or written as if such distinctions could be made in practice. They speak of uterine phlebitis, of uterine inflammation, of inflammation of the uterine appendages, of peritoneal puerperal inflammation, of inflammation of the uterine lymphatics, as if these were distinct diseases to be detected in practice by well marked symptoms, and treated accordingly. But practical men will, I think, bear me out in the opinion, that such statement cannot be supported by an appeal to practice. Thus, then, it would appear, that scarcely any two persons agree respecting the name of this disease; an unhappy predicament, implying what we already know, the utmost obscurity as to the real nature of the disease. But, as inflammation is, I believe, always present; as this has a reference more or less direct to the womb itself, I feel disposed to suggest the simple appellation of puerperal hysteritis, as being, under all circumstances, the most appropriate. My reasons for adopting this term, in preference to others, will be given at length in the section treating of the morbid appearances.

Section II.

To the Physician practising rational medicine, diagnosis must ever be the most important question; this the empiric naturally disregards, or, at least, affects to do so. Now what are the symptoms by which we may early (for it would seem that a late recognition of the disease avails nothing) recognise the presence of this formidable malady, the puerperal fever, or, as I have ventured to call it, puerperal hysteritis; viewing, as I do, the womb, and its peculiar condition after labour, as the centre which originates all the evils; the *fons mali*, as we may term it? But, before this question can be answered, simple though it appear, there is another, the solution of which has manifestly baffled all medical inquirers up to the present day. Are there four diseases or one included under the term puerperal fever?

On this point, then, I must first address you. When I examine the works of foreign physicians, I find a remarkable conformity in their descriptions with the writings of my countrymen in all that regards this disease. Take, for example, the recent Treatise of Dr. Gamberini, practising in Italy. The symptoms he mentions are the same, or identical with those we meet with in this country. After death he finds lesions,—meaning inflammation of the peritonæum,—frequent but not constant; that in some cases proofs of there ever having been any inflammation of the uterus or its appendages, membranes or otherwise, are wholly absent. On the other hand, in these *post-mortem* appearances he does not fail to observe the prevalence of purulent matter in the venous, lymphatic, and absorbent glandular systems, but not to the exclusion of marks of inflammation in other organs. Frequent collections of fluid in the large serous membranes, sometimes of a purulent, sometimes of a milky appearance, are also adverted to, together with secondary morbid complications of the respiratory organs. In the majority of cases, the venous system has undergone great alterations—a fact which must have been well known to the illustrious brothers, John and William Hunter, and to that great school, the highest that ever existed, which included in it the first of pathologists of all ages, the school of Dr. Matthew Baillie. To Gamberini, since I allude to the Italian school, we perhaps owe the observation, that in this fever the blood is more watery, the globules and albumen are diminished, the condition of the fibrine is normal. He considers vitiation of the blood as certain, and that it takes place prior to the development of the fever, thus retrograding towards that pathology—the humeral—whose reign in physic it was supposed had been closed by the vitalists, solidists, and neuro-pathologists (for they are all the same) of the Whytt and Cullen school; lastly, and this is more to the point, in some women dying of puerperal fever in Italy, (as we find in this country,) with, I presume, all the well-marked symptoms characteristic of its presence, and recognised as such by competent medical attendants, scarcely any lesions—meaning morbid appearances—have been met with after death; or, at least, none sufficiently serious to account for death. Thus it would appear that the disease is accompanied by the same phenomena in Italy as in Britain; that the same obscurity exists in respect of its real nature, and that between

the symptoms and the *post-mortem* appearances there exists no constant relation.

This is not my opinion; but it is a deduction fairly drawn from the works of British and foreign authors, from the writings of Gooch and Gamberini, and of many others.

The fever which shows no localization is an essential fever. The fever which has for its cause an inflammation of one or more organs, accompanied by an inflammatory fever, is of a nature wholly distinct from an essential fever.

All must recollect the attempt of Broussais and his followers, and, before his time, of the learned Ploucquet and his followers, to localize common fever; to give its origin a locality somewhere in the brain, in the spinal marrow, in the stomach, and intestinal tube. All these attempts failed. But the cases in which no *post-mortem* appearances have been found after severe puerperal fever are rare,—I had almost said doubtful; whereas, the frequent occurrence of the opposite effects is known to all. In the sweeping epidemics which have from time to time cleared out those unhappily planned institutions called lying-in hospitals, it is well known, that after death the morbid appearances to be afterwards described are all but constantly present; that the lesions are not all equivocal, but serious and manifest to the merest tyro in pathology. I cannot, then, think that two diseases are here treated by the physician. It is but one disease, terminating speedily in death, sometimes by errors in treatment, sometimes by fatal atmospheric influences over which we have little or no control.

In the ponderous volume of Dr. Meiggs, of Philadelphia, I can find nothing American; everything is British or French, so that the reader is left to draw the inference, that the disease suffers no modification by the climatic influence of another hemisphere—another continent. I confess I should have expected it to be otherwise, but Dr. Meiggs's silence on this point leaves no alternative but to draw this inference. He views the disease as it was viewed by Dr. Gorden, Mr. Hey, and Dr. Lee,—the pathology as it has been made out in France. He regrets Gooche's doubt, and stands by the depleting system as the only safe and best. I regret much that he has not given us the result of his own experience and of his colleagues. Dr. Burns, of Glasgow says, that he never knew any patient recover from what he calls malignant puerperal fever, who had been largely bled. I venture to recommend this passage in Dr. Burns's works to Dr. Meigg's serious consideration. If, under the name puerperal fever, several distinct diseases have been included, there assuredly must exist so many distinct sets of symptoms.

There are, it is true, several high authorities in favour of the opinion, that in disease, a series of symptoms may arise, and do arise, resembling inflammation, but wholly independent of it; aggravated by depletion, curable by stimulants, by morphia, and narcotics generally. This is merely another mode of expression, another formula for the asthenic inflammation of Brown (a). We must not be deceived by words. In which respect do these views elucidate the difficult question I now consider? Do they warrant a conjecture, that all the symptoms of puerperal fever may be present prior to the existence of any real inflammation; that the inflammatory and fatal results are the direct result of the depleting treatment adopted? This surmise naturally arises from such statements as the abeve—not wholly, I admit, without foundation—but this will be fully treated of under another section. I shall proceed, therefore, with the analysis of symptoms. It has been admitted, I think, by most authors, that the following symptoms are usually present in puerperal fever:—Great tenderness of the hypogastrium, increased by pressure, pyrexia, pain in the forehead, rapid and feeble pulse. When the attack is violent the patient generally lies upon the back with the knees drawn up to the trunk of the body. The abdomen at first is soft and flaccid, and, excepting the region of the uterus, is frequently not affected by pressure. The pain often undergoes exacerbations similar to after-pains, and may be mistaken for these by inattentive observers; and thus the true character of this dangerous disease may be overlooked. After a time the whole abdomen becomes swollen and tympanitic, and the pain either wholly subsides or becomes still more intense than at the commencement. The breasts are flaccid, the milk suppressed, lochia irregular and offensive, countenance anxious and despondent, eyes without animation. The breathing is short, with cough; urine often passed with pain and difficulty; breath sour, odour peculiar; diarrhœa and vomiting of dark-coloured fluids or blood sets in, the pulse becoming extremely rapid and feeble, the tongue dry and brown; the lips and teeth are covered with sordes, extremities cold, and death follows at no very remote period. These are the symptoms I have myself witnessed, and they must be familiar to all who have had the unhappy opportunity of witnessing puerperal cases, more especially when epidemic. But are these symptoms, as some seem to think, peculiar to that *form* of puerperal fever which originates in inflammation of the peritoneal covering of the uterus and of the peritoneal sac? I think not; for first, and this must never be lost sight of until fairly refuted, it has been asserted on the highest authority that all the symptoms now enumerated may be present, and yet not a trace of inflammation in the peritonæum, or elsewhere, be discovered after death: and, secondly, the selfsame symptoms are present in inflammation of the ovaria and Fallopian tubes. Again, the same train of symptoms appear when the disease originates in inflammation of the muscular structure of the uterus itself; the occasional presence of headache and delirium in this form of the disease are no sure indicators of its presence, since they occur also in other cases having a different origin. It is a most fatal form of disease, but it is not a different malady; neither is it characterized by any pathognomonic symptoms. It is admitted on all hands, that, could we discover the presence of this particular form of disease, depleting methods would not be resorted to. But are such measures advantageous in any of the other forms? The consideration of this question we also refer to another section; our affair, at present, is with the symptoms, and with the question all-important to the practical man,—Are there *four* or more diseases called puerperal fever, or only one? When the inflammation chiefly affects the absorbents of the uterus, it gives rise to symptoms quite similar to those already enumerated; the fatal result is, if possible, more rapid, and all remedial means of no avail. But, neither does this form of the disease give rise to any peculiar or instantly recognizable symptoms. Lastly, it has been long known that the veins of the uterus are found, in many cases of puerperal fever, to be acutely inflamed, enlarged, and filled with pus, constituting uterine phlebitis. Now, what are the symptoms indicating this formidable and fatal form of puerperal hysteritis? They are, as nearly as may be, identical with the symptoms originating in other causes. It is a most insidious form of the disease, but rapidly fatal when the nervous and vascular symptoms sympathise with the local affection, the state of the lochia giving no information as to its presence or absence. Thus, we have seen that one class of symptoms, remarkably uniform in their character, distinguish this most formidable disease, however originating,—and under very different climates; that there is no real foundation for supposing that there exist more diseases than one in this particular instance; and that, in all probability, such ideas have had their origin in two circumstances: first, in confounding sporadic cases, and cases in which the disease had not fully established itself, with those more alarming cases originating or occurring during particular epidemic conditions of the atmosphere; and, secondly, in the attempts of pathologists to discriminate from morbid appearances—that is, from *ex post facto* knowledge—cases which, during life, exhibited no such distinctions; and which, perhaps, had they been recognised, could have led to no peculiar treatment.

(a) Kelly, Marshall, Hall, Billing.

Part III.

I prefer the term "morbid anatomy," objectionable though it be, to the word "pathological." The term "appearances after death" is perhaps the best. The illustrious Morgagni led the way to this great work, namely, an "Inquiry into the Seat and Causes of Disease;" Baillie followed, and all but perfected the inquiry; microscopic research and a wider field, occupied by many inquirers, have somewhat extended his views.

In the disease I now discuss, it was early known that inflammation existed somewhere in the abdomen. In 1746, it was perfectly well known in France (Paris) that the disease essentially consisted in inflammation attacking some one or other of the abdominal viscera; at least it was known that extensive lesions from inflammation were found, after death, in those puerperal women who died in Paris during the epidemic of 1846. The appearances were described pretty accurately, and so as to leave no sort of doubt of the thorough knowledge the Medical men of that period had of the disease.

Long afterwards the Hunters in Britain made out the same facts. Now, what precisely are these facts? The condition in which the uterus, and, we may add, its vessels, nerves, membraneous coverings, and so-called ligaments, and, by implication and contiguity, the tubes and ovaria, are left after delivery, must, I think, be admitted by all to be quite peculiar. To this peculiar condition, in which no other organ can be placed, must, I think, be ascribed the liability to quick-spreading dangerous inflammation under certain circumstances. Of these circumstances, the most dangerous, unquestionably, is, the prevalence of a peculiar atmospheric condition, giving rise to an epidemic; and secondly, the fearful augmentation of force this noxious state of the atmosphere acquires, when, unhappily, lying-in women are collected together into hospitals prepared for their reception by the misdirected efforts of the charitable and humane. Such Institutions become, then, the gates which lead to death. I need not trouble medical men with statistics. On this point the remedy is in the hands of the public. It is not quite correct, then, to say, that "the pathological anatomy of the uterine organs in puerperal women had not received that attention which its importance demanded." Its pathological anatomy, with the exception, perhaps, of a few additional observations on the extension of the inflammation to the veins and lymphatics of the uterus, has been known for at least a century. But, after all, this is but a secondary question.

What are the appearances which, being found after death, ought, by determining the true nature of the complaint, to have led to a rational, if not a successful mode of treatment? And how comes it, that although all pathological anatomists are nearly as one in respect of those appearances, physicians still disagree as to the treatment, dispute violently, and contest every method of treatment hitherto proposed, leading, in one instance at least, to this extraordinary result—a distinct denial, by an eminent practical man, (a) of the utility of morbid anatomy in that department of the Medical art—the only truly important one—namely, a rational and successful method of cure. But, before examining more especially the causes of these doubts and difficulties which have so beset the Profession in a matter of the highest interest to humanity, let me discuss *seriatim* the appearances themselves. It is, I think, agreed on by all, that in certain cases of puerperal fever, more especially when epidemic, and when the disease is peculiarly virulent, sweeping out hospitals for lying-in women, and spreading even to the abodes of the healthy, that the *post-mortem* appearances generally are lymph and sero-purulent fluids poured out into the cavity of the peritonæum in more or less abundance; unequivocal marks of extensive inflammation of the peritoneal membrane itself, and more especially of its uterine and visceral portion generally. This is the most usual of all the appearances met with after death in the bodies of those dying of puerperal fever. Why, then, object to the name given to the disease by Dr. Gooch? He called the disease "peritoneal fever," basing his ideas on a mistaken view, as I think, of Mr. Hunter's dissections. He seems to have thought that the Hunters considered the disease as essentially consisting in an inflamed peritonæum; but I cannot find anything in the works of these illustrious men warranting so overstrained an inference.

(a) Dr. Gooch.

Besides, we shall find presently, that the peritonæum may not have suffered, the inflammation having commenced, as I presume it always does, in the deeper organs, and not, in these particular cases, extended to the peritonæum.

It seems to me merely a question of extent. It is, no doubt, quite possible that the inflammation may, in some cases, commence in the peritonæum; but, for my own part, I feel disposed rather to think that it terminates there, commencing more generally in the deeper seated viscera—those viscera to which the peritonæum gives merely a covering, more or less perfect. The subserous cellular tissue partakes, in most cases, extensively of the mischief. It is inflamed; coagulable lymph and even pus appear in it in many places; abscesses form in the various portions investing the uterus, or assisting in forming, with the peritonæum, the broad and round ligaments. But the uterine portion of the subserous cellular tissue is *that* chiefly affected. As we proceed deeper in the dissection, we find, in most cases, the body of the uterus also affected; its muscular tissue softened and full of blood; its veins inflamed and filled with pus; its absorbent especially distended with purulent fluid, and enlarged sometimes to the size of goose-quills, losing the very appearance of lymphatics.

These veins and lymphatics may be traced upwards by the spermatic and other vessels towards the renal vessels and thoracic duct. Such are the appearances which have, for at least seventy years, chiefly attracted the attention of pathologists; and, were they uniformly present, one fertile source of dispute would be exhausted. But this is not the case. On the faith of various pathologists, it has been asserted, that the morbid appearances are occasionally confined to one tissue. Admitting the possibility of this,—knowing well that strictly contiguous organs are not necessarily involved in one and the same inflammation,—aware that the very thinnest layer of cellular tissue insulating physiologically and pathologically, though uniting mechanically two organs most intimately, may yet arrest the spread of inflammation by contiguity, I yet feel disposed to doubt the fact as stated above—namely, that in puerperal fever the morbid appearances are often limited to one organic tissue. From all I have learned from those who have carefully dissected many cases, I lean to the opinion that, when inflammation sets in, no matter what the nature may be, it spreads to contiguous organs, involving them in its dreadful consequences. It is always dangerous to theorize in medicine, and I offer the following proposition to the Profession with some hesitation, and rather with a view of obtaining for the subject a careful investigation.

It would seem, that in puerperal fevers, whatever be the seat of the original mischief, whether uterus or ovaria or peritonæum, the symptoms strongly re-resemble each other, and the results are equally disastrous. It would appear, then, that abdominal inflammation speedily following child-bearing, has in it something peculiar which must be sought for in the puerperal condition of the sufferer. It is this condition then which gives to the concomitant fever its peculiar character, it is this condition, then, which renders the disease so untractable. It is in this condition of the fluids and solids of puerperal women, that we must, I think, look for the cause of the great mortality. To bring it into play, all that is wanted seems to be, the collecting a number of puerperal women in an hospital; then comes that epidemic constitution of the atmosphere, the fertile source of so many destructive plagues. Inflammation is kindled up of an unhealthy kind, for it cannot well be otherwise in organs congested, overloaded, irritable, and suffering, the result being a mortality exceeding that in the oriental plague.

But the greatest obstacle which exists in respect of our arriving at a sound knowledge of this disease, is a fact, if it be one, and which the candid Gooch had the courage to state. Here are his words:—"The most remarkable circumstance which the experience of the last few years has taught us about peritoneal fevers is, that they may occur in their most malignant and fatal forms, and yet leave few or no vestiges in the peritonæum after death. The state of this membrane after death, indicated by pain and tenderness of the abdomen, with a rapid pulse, appears to be not one uniform state, but one which varies so much in different cases, that a scale might be formed of its several varieties; this scale would begin with little more than a nervous affection, often removable by soothing remedies, and, when terminating fatally, leaving no morbid appearances discoverable after death; next above this, a state in which this nervous affection is combined with some congestion, indicated in the cases which recover by the relief afforded by leeches, and in the cases which die by slight redness in parts of the peritonæum, and by slight effusion of serum, sometimes colourless, sometimes stained with blood. Above this might be placed those cases in which there are in the peritonæum the effusions of inflammation without its redness; namely, a pale peritonæum, and no adhesion; a lymph like thin layer of soft custard, and a copious effusion of serum rendered turbid by soft lymph. Lastly, the vestiges of acute inflammation of the peritonæum; namely, redness of the membrane, adhesion of its contiguous surfaces, a copious effusion of serum, and large masses of lymph."

Following these ideas, Dr. Gooch drew the inference, that symptoms and dissections cannot settle the question respecting the pathology of puerperal fever; an inference, I think, in which he has been tacitly followed by many of our Profession, notwithstanding the energetic remonstrance of a distinguished metropolitan accoucheur.(a)

"The effects of remedies," he observes, "if accurately observed, form the most important part of the history; they are like chemical tests, frequently detecting important differences in objects which previously appeared exactly similar. Symptoms and dissections can never do more than suggest probabilities about the nature of a disease and the effects of a remedy on it A trial of the remedies themselves is the only conclusive proof." (b)

It were useless to deny that there is much that is true in the remarks of this excellent accoucheur, much also of a principle which it would be most dangerous to admit into medicine; and a something which is, in the main, wholly incorrect. But at the time Dr. Gooch published these remarks, there existed in London, and especially, I believe, in the school in which he taught, a feeling against the importance of pathological anatomy,—a prevailing idea expressed above in Dr. Gooch's own words, "that morbid anatomy did not, or had not, benefited practical medicine to the extent its cultivators anticipated."

So far this may be true; but there was great danger in laying it down as a general principle; it discouraged inquiry in the right direction, it tended to disjoin medicine and anatomy, and it gave an occasion and a pretext for those whose minds and education leaned that way, to plunge at once into open and avowed empiricism. But for dissection, we must have for ever remained ignorant of the nature of the disease. I do not speak here of the treatment; therein I venture to differ from Dr. Lee. The appearances after death have, unhappily, not led to a successful mode of treatment, but they explain to us wherein consists the essential character of the local origin of puerperal fever;—it is a fever of a rapid and destructive tendency, caused by and preceded by a local inflammation, affecting mainly the womb, though possibly not in all cases rigorously confined to this organ, and occurring chiefly when an epidemic constitution of the atmosphere prevails.

It is the same with hospital gangrene and erysipelas. For three months at a time it has been found that all operated on in a large hospital died; the surgeons were forced to desist; the constitution of the atmosphere suddenly changes and wounds do as well as ever. It is the same with puerperal hysteritis. In general, after childbirth, everything speedily returns to its normal condition; but ever and anon there appears an epidemic sweeping the hospital. Now, what has happened? Nothing has changed but the atmosphere.

Before concluding these remarks on the Pathology of this disease, I shall take the liberty of adverting to one or two points connected with this, by far the most important, part of the discussion. To me it is evident that Dr. Gooch believed, that the fatality in puerperal fever arose mainly from the depleting treatment. He does not, it is true, precisely say so in so many words, but this evidently is his meaning. He starts from a point of the scale suggested to him partly by a few rare cases, in which, after death, the abdominal organs were supposed to have presented no lesions whatever. From this point he gradually proceeds to others, by an ascending scale which he himself has sketched; yet, in his own treament he lost one in four, a mortality not much short of the Oriental plague. There must, then, be some mistake here, one way or another. Dr. Lee thinks that the cases seen by Dr. Gooch, in 1828 and 1829, were not genuine examples of low child-bed fever; for, of twenty-eight women attacked by this disease, and treated, as Dr. Gooch had recommended, with Dover's powders and warm cataplasms, seven died, or one in four. If I am right in the inference I draw from these expressions, it runs thus: "the recoveries could not have been cases of low child-bed fever, because they recovered under gentle treatment."

Now, I confess this reasoning does not appear to me very conclusive; the fever was low enough, for it killed one in four,—this beats the worst form of typhus. It implies also that the accoucheurs and Dr. Gooch himself were incompetent to a diagnosis, which I am unwilling to believe, whilst I readily assent to the proposition, that irregular spasmodic contractions of the uterus, constituting after-pains and irritation of the intestines, have been mistaken by superficial observers for puerperal fever; there still remains the logical difficulty,—a want of proof. "Under one treatment nearly all die; under another diametrically opposite treatment nearly all live." How is this to be explained. On this point I venture with great diffidence to make the following remarks:—

A woman is seized shortly after delivery with all the symptoms of puerperal fever, or, as I call it, puerperal hysteritis. She is treated with very gentle means; turpentine enemata, fomentations, opium; and, notwithstanding the presence of symptoms indicating severe peritoneal and deep-seated abdominal inflammation, she easily recovers. As she recovered under this treatment, by reason of this recovery the case is summarily declared not to be a case of puerperal fever at all; but merely *pseudo*-peritonitis. The accoucheurs, says Dr. Lee, were simply mistaken. But now, should this woman die, and no lesions be found after death, the case becomes still more puzzling: in the first instance—that of recovery—it upsets the whole value of symptoms; in the second, it saps to its foundation pathological anatomy. This was precisely what Dr. Gooch stuck at, and expressed with that caution for which he was remarkable. There are two ways of solving this difficulty; others may probably occur to Medical men. First,—Is it quite certain that such cases occur as those I allude to,—cases in which no morbid appearances were found after death?

I put this question to a distinguished pathological anatomist,(a) and he offered me the following solution, drawn from his own experience:—

"Soon after my return from the Continent in 1821-22, my position as Conservator of the Museum of the College made me familiar with every form of pathological anatomy; and I was daily asked to be present at, and to superintend *post-mortem* examinations for some of the most distinguished Practitioners in medicine and surgery; amongst whom I may mention Professor Hamilton, Alison, Abercrombie, and a host of others.

"About this time, or soon after, an epidemic attacked puerperal women; and, as Dr. Campbell had at that time a strong suspicion that puerperal fever was contagious, or, at least, that some destructive principle was carried about the person of the accoucheur, more especially by handling the bodies of those who had died of the disease, he requested his students to abstain from touching them, and solicited me to make the dissections in their presence. Thus it was that so many opportunities occurred to me of making minute and careful *post-mortem* examinations of most of the fatal cases.

"Another epidemic occurred, and I think I saw

(a) Dr. Robert Lee.
(b) Gooch's Work.

(a) Dr. Knox.

the Edinburgh Lying-in Hospital cleared out twice by this fatal malady. On all these occasions every opportunity was offered me for the most minute examination of the structures implicated. Professor Hamilton was my most intimate and esteemed friend; the sons of the gentleman, Mr. Moir, who assisted him at that time, were my students; and my own assistants were the persons employed when I could not be present.

"I could not at the present moment charge my memory with the number of dissections made, but it was considerable; and on several occasions the altered structures were dissected before, and explained to, numerous classes of students. It was thus I learned, (I speak here of my own experience,) that in most cases the peritonæum is deeply affected by inflammation, its cavity having been found so frequently filled with pus; but occasionally the inflammation confines itself more to its visceral surface, and then the effusions are less copious. In all, the uterus appeared to be more or less inflamed; occasionally the Fallopian tubes; the ovaria also were occasionally completely disorganized; the uterus softened, not fully contracted, dark-coloured, deeply inflamed; lastly, in some cases, and those, perhaps, the most numerous, the lymphatics of the uterus, and the lymphatic glands, were greatly enlarged and filled with pus. The veins were found inflamed, and also contained purulent fluids, but to me they seemed to be less seldom affected than the lymphatics. My own opinion on this point is, that in all probability, in every serious epidemic the lymphatics and veins of the uterus will be found to be affected more or less. I am, and was then, quite aware that there are medical men who believe that a person may die with all the symptoms of puerperal fever, and yet no lesion sufficiently serious be found in the uterine system to explain the catastrophe. But I doubt this, and am of opinion, that the organs had not been examined with sufficient care.

"These were the opinions I formed from the first epidemic I witnessed in 1821 or 1822, and I have seen no cause to alter them."

"M. Tonnellé does, no doubt, make mention of a few rare cases (ataxic puerperal fever), in which the changes which had taken place in the uterine organs were comparatively slight, and consisted of an exudation of lymph at the neck of the uterus and into the cavities of the uterine veins; but I cannot readily consider as slight an inflammation of the uterine veins, however limited it be. All depends, in a case of this sort, on the constitution of the patient and of the atmosphere. When both are unfavourable, a very small injury will excite a disease over which the Physician has no control. We see this every day in dissecting rooms and hospitals, where a slight puncture proves quite harmless to some,—rapidly destructive to others. Upon the whole, I do not think that a well-authenticated case exists of a woman having died of puerperal fever, without exhibiting *post-mortem* appearances to explain fully the cause of death."

ON COD-LIVER OIL.

By WM. OLIVER CHALK, Esq., M.R.C.S.,
Late Surgeon to the Royal Sea Bathing Infirmary, Margate.

Six years ago I published the results of four months' trial of this remedy. (a) I felt at that time some doubt as to the utility of such a proceeding, so great was the disbelief in this country as to its remedial powers in scrofulous and other diseases. Since then, however, the cod-liver oil has gradually risen in the estimation of the Profession; but there are still some who persist in the opinion, that the oil has no specific properties, and that other fish, (b) and even vegetable oils, are possessed of equal efficacy. With the non-professional public it seems just now to have attained all the notoriety and damaging influence of a fashionable nostrum. Of the two evils to the Medical Practitioner the first is the greatest; for, when once the idea prevails, that another oil will do as well, those who are to supply it will scarcely concern themselves whether it be obtained from the whale, (a) or from the liver of the cod-fish, and the probability is, that this valuable remedy will again fall into disuse.

In a Report, (b) emanating from the Physicians of the Hospital for Consumption, it is observed, that "other animal oils (not derived from the liver) and vegetable oils have been tried, with a view of ascertaining how far the operation resembled that of the cod-liver oil." As far, however, as the trial has gone, it does not appear that they possess the same powers, (c) for my own part, I have no hesitation in saying, that oil obtained from the liver of this fish has properties peculiar to itself. Without denying that whale oils possess the qualities described by Mr. Druitt, I may state, that since the year 1843, the quantity of spurious preparations in the market has increased rapidly; and, whenever I have been disappointed in the effect produced, I have found, (with rare exceptions,) that it was owing to the adulteration of the cod-liver oil itself.

Notwithstanding the publication of Dr. H. Bennett's pamphlet in 1841, and of my cases in 1843, and 1844, this remedy obtained, for a time, a dubious kind of celebrity in this country. That gentleman was considered by some to have over-estimated its sanitive influence; and, as far as I myself was concerned, it was thought to be a crotchet of my own. Mr. B. Phillips (d) conceived that my cases gave no very favourable idea of its remedial value. Admitting that I had given the medicine a fair and ample trial, he stated that the cases I published were not purely scrofulous—doubted if any improvement had taken place, and, if so, whether improved nutrition and change of air were not the cause of it. His estimate of its virtues were less favourable than that of many others; but there was scarcely any form of scrofula he had not seen improve under the oil; viz., "enlarged glands, sinuses, ulcers, lupus-like scrofula of the face, caries." When I had the pleasure of reading Mr. Phillips's work, and came to the assertion, that the cases published were not "pure cases of scrofula," I felt some surprise; for on referring to them I found that 26 out of the 40 were purely scrofulous: viz., tuberculized cervical glands, 7, in 2 of which simple enlargement existed; 3 were complicated with ulcers, 1 with tuberculized axillary and inguinal glands, enlarged liver, and ascites; 1 with mesenteric disease; hip-joint in the suppurative stage, 4; knee joint, 4; elbow, 1; caries of the phalanges of the finger, with hypertrophy, and caries of the os calcis, 1; caries of the inferior maxilla, 1; caries of the tarsal bones, with hypertrophy, 1; necrosis of the femur, 1; strumous ophthalmia, 1; tubercular abscess of the thigh, 2; phthisis, 3. One of these was complicated with lupus-like ulcer of the face. It seems probable, that Mr. Phillips meant merely to say, that *all* the cases I had reported were not scrofulous, and so far he would have been correct. By the preceding abstract, it will be seen, that the cases he had observed to improve whilst taking the oil were precisely such (*even to the lupus-like ulcer of the face*) as my own; and, admitting that improved nutrition and change of air only were operative with my patients, his own, who, we are to presume, had not these advantages, did get better, and, considering the paucity of remedies possessed of any direct influence over these obstinate local affections, this coincidence in the results obtained, appears to me valuable testimony in favour of the oil. I should also mention, that I did not begin to prescribe it until the commencement of July, 1843. On referring to the Report, it will be seen, that 13 of the 26 cases were admitted at various periods during the month of May preceding. As far, therefore, as they were concerned, the immediate and marked improvement observable under its use, could not be attributed to the hygienic conditions spoken of by Mr. Phillips—little good having been effected during the intervening period.

The number of patients under treatment, from July to the end of October following, were by no means represented by the 40 cases published; they were selected from 100, purposely chosen from numerous others for special observation. By so doing, I hoped to convey an idea of the extended remedial qualities of this medicine. Between the years 1843, 1844, and 1845, not less than from 1,000 to 1,200 individuals had been brought in some form or other under its influence at the Infirmary. Subsequent experience has confirmed the observations I then made in my Report of its *modus operandi*. Beyond all doubt the most striking peculiarities of the oil are its nutritive properties, influence on the chylopoietic organs, especially the liver, and remarkable power of increasing flesh and weight with a rapidity unknown to any other medicine.(a) Some remarkable instances of this kind are also cited in the Report already mentioned (p. 41).

The promptitude and certainty with which its curative powers are manifested in almost every form of scrofula, offer, in my estimation, a strong contrast to any other remedy hitherto used. The effect produced by it in phthisis, (b) during the softening and suppurative stages, may well be termed marvellous. Much as I was struck with the circumstance, and assured of its decisive properties in this respect, I merely stated that it had been remarked by myself and others; but in order to arrive at positive conclusions, a further and separate inquiry was necessary. In the seasons 1844 and 1845, ample opportunities were afforded me of accomplishing it, and although I did not publish the result, the success attendant on the trial was far greater than I had anticipated. I may, therefore, correct a statement in the Report from the Hospital for Consumption (p. 38), that "the earliest trials of this remedy made on a large scale were those instituted at the Hospital." At the time it was so extensively used at the Margate Infirmary, that establishment scarcely existed, and the cases there admitted for a time were so few, that it was not deemed advisable to publish a report of them until 1849. The particular influence exercised by this oil on the hepatic secretions was so remarkable, that my attention was early directed to the point, and it has since been observed by Dr. C. B. Wiliams.(c) I have not, however, remarked, as he has done, that the bulk of the liver becomes really augmented during its exhibition.

Amongst other chronic diseases, none derive more remarkable relief from the use of the oil than those of rickets, for which it may be considered almost a specific. Preceded by the application of two or three leeches to the epigastrium, according to the patient's age, with occasional mild alterative purgatives and a generous diet I can hardly call to mind an instance of failure. Such sometimes is its rapidity of action, under this plan of treatment, that I have seen children, who were previously quite unable to walk or stand, running about after a few doses only, and by taking it for some months, their deformity completely subside. No less powerful its influence in chronic rheumatic affections,—arthritic and muscular,—not only medicinally, but used as a liniment with opium. In this form, I have seen prompt relief obtained even in acute

(a) *Medical Gazette*, Dec. 29, 1843, and Jan. 5, 1844.

(b) *Medical Gazette*, "On the Nutritive Properties of Fish Oil." By R. Druitt, Esq.

(a) The most common adulteration seems to me to have been effected with sperm oil.

(b) *Vide* p. 40 of the Report.

(c) Messrs. P. M. Duncan and R. S. Nunn, denying the specific properties of cod-liver oil, propose almond oil as a substitute, (see *Medical Times*,) which they declare to be precisely similar in its action. They remark, that it never purges, and care must be taken of the *biliary secretions*. In these qualities it is entirely dissimilar to cod-liver oil, which usually acts as a mild aperient, especially with children, and has a peculiar influence on the hepatic secretions.

(d) Phillips on Scrofula, p. 267.

(a) In one of my cases, that of a man who was much out of health and greatly emaciated, a stone in weight was gained under its use, after a lapse of ten weeks.

(b) Dr. Benson, of Dublin, thinks that the tendency of the oil to check emaciation, "restore wasted flesh, and bring back colour to the faded cheek" in phthisis, might prove a predisposing cause of pneumonia. It seems hardly possible to conceive that such evidences of returning health should end in pneumonia, even though, as he states, cadaveric inspections seem to favour the supposition.—Vide *Medical Gazette*, Feb. 1, 1850, p. 210. "On a probable danger arising from the use of Cod-liver Oil."

(c) *London Journal of Medicine*, Jan. 1, 1849, p. 16. Dr. C. P. Williams on Cod-liver Oil in Phthisis.

rheumatism. Bronchocele is greatly benefited by its exhibition internally and externally, and the local efficacy much increased by keeping the tumour covered with cotton wadding. A sensation of warmth is generally excited in the parts to which it is applied. It is, however, much to be regretted, that the disagreeable odour imparted by the oil, when used locally, affords a considerable obstacle to its employment; besides which, linen is indelibly stained and rotted by it.

Much has been said, as to whether the medicinal qualities of this remedy depend on the small trace of iodine known to be in combination with it. The very extensive use of this preparation at the Margate Infirmary in its various forms, since the year 1832 up to the period of the introduction of the cod-liver oil in 1848, afforded full scope for establishing a comparison. Nothing could be more essentially distinct than the action of these medicines; and I am inclined to think, in the absence of any evidence to the contrary, that the virtues of the oil are owing, as Dr. C. B. Williams states, to the bile constituents.

To whatever cause its therapeutic activity is assignable, age impairs it; the fresher the oil the greater its efficacy, the better it agrees with those for whom prescribed, and the larger the quantity that can be given. I am by no means, however, an advocate for large doses; after repeated trials, it appears to me that one or two drachms three times daily (I prefer one) are commonly sufficient:(a) the same dose serves alike for adults and children, the latter bear it better, and are less liable to the derangement of stomach sometimes produced. The winter months are those in which this remedy can be exhibited with the best effect. During the summer, if the weather is particularly warm, it is more apt to excite febrile and dyspeptic symptoms; conjoined with tonics of bark, quinine, steel, &c., it is exceedingly efficacious.

When first I prescribed this remedy it was with a feeling of incredulity as to its power over scrofulous diseases: the most hopeless cases were selected for trial with the happiest results. Subsequent experience has increased my estimate of its virtues; and few there are, I think, who have had an opportunity of fairly watching the effects of cod-liver oil in alleviating many hitherto unmanageable forms of chronic maladies, can hesitate to admit that, for extensive usefulness and promptitude of action, it excels all medicines that have been introduced of late years. I have been induced to offer the preceding remarks in the hope of preventing the adoption of dubious substitutes for a remedy of known efficacy.

ON THE PHOSPHATE OF AMMONIA, AND ITS EMPLOYMENT IN GOUT AND RHEUMATISM.

By DR. S. EDWARDS.

(Read before the Westminster Medical Society.)

In 1847 I drew the attention of the Provincial Medical and Surgical Association to the subject of the phosphate of ammonia, and its use in the treatment of these diseases; it is however but little prescribed in the metropolis, and as none of the standard works on Materia Medica make mention of it as a therapeutic agent, the following description of it, being an epitome of the researches of Mitscherlich may be of service to the Profession:—"The mutual action of anhydrous phosphoric acid and ammonia has not been studied; they probably give rise to *amide*. The neutral phosphate of ammonia may be obtained pure by saturating phosphoric acid with ammonia or carbonate of ammonia, and carefully evaporating, so as to avoid the production of an acid salt. It may also be formed by adding carbonate of ammonia to the acid phosphate of lime obtained from bone earth, till no further effervescence or precipitate of phosphate of lime follows; filtering and evaporating, taking care, however, to leave a slight excess of ammonia. The solution, left to itself, deposits the salt. Its primary form is an oblique rhombic prism, the smaller angle of which is 84° 30′. Its prisms are often terminated by diedral summits. It is soluble in four parts of cold water. When heated it melts, and losing ammonia, leaves hydrated phosphoric acid. It probably consists of—

Ammonia	1.	17.	25.	57
Phosphoric Acid	1.	86.	54.	13-54. 426 Mitscherlich.
Water	1½	13.5	20.	30

Its taste is cool, saline, and somewhat urinous—hot water dissolves scarcely more than cold. It is deliquescent; and exists in minute quantity in the urine, in the proportion of about 1·65 in every 1,000 parts. When taken internally in the dose of ten grains (the ordinary one,) it produces no great sensible physiological symptoms. At first a slight feeling of nausea, with heat at the epigastrium, after which, if the surface be kept warm, it acts as a diaphoretic. It also acts as a diuretic. When given in cases where uric acid exists in increased quantity in the system, either pure or combined, it shortly produces a deposit of urates in the urine.

With respect to the proximate cause of gout and rheumatism, they may be regarded as blood diseases, arising from a morbific matter circulating in the blood, this matter being formed in the primary and secondary assimilating processes, thereby occasioning a disturbance of longer or shorter duration in the nutrition of parts to which it is attracted. Parkinson and Murray Forbes, who wrote at the end of the last century, believed uric acid to be the cause of gout. From chemical and microscopical experiments, I was led to view both diseases as arising from the same cause—looking upon them with Barthez and Chomel, as mere varieties of the same disease, although not allowing with them that the parts affected in each offered any diagnostic mark; for I consider the following remark of Dr. Todd to be correct; "Gout shows at first a decided predilection for the small joints,—those of the hand and foot, but in time *all* the articulations are obnoxious to it; and not only they, but also tendons, ligaments, bursæ, and synovial sheaths." The case of an old lady who had been troubled with gout for some years will illustrate this point; she has the metatarsophalangeal articulations of the great toes enlarged. These frequently throw out chalk stones, and secrete fluid urate of soda. When this subsides she is troubled with rheumatic pains all over the body, and on the gout and its secretion returning, the rheumatic pains entirely leave her, evidently showing such a connexion between the urate of soda and the rheumatism as to warrant the inference of their being cause and effect. My experiments confirm the fact of uric acid existing in the blood both in gout and rheumatism; but not to the same extent in the latter as in the former, the lithic acid being partially thrown out by the kidneys and skin in the latter, in proof of which I may refer to Becquerel's cases, also to Simon, and some experiments of my own upon this point. When it is remembered, that the lithic acid is supplied by the changing tissues of the body, as well as by the nitrogenized elements of the food, the fact of the one attacking the young and badly nourished, and the other the older, more plethoric, and those who live high, is scarcely contradictory. With reference to the late Dr. Prout's theory of lactic acid being the cause of rheumatism; I agree with Liebig in thinking Berzelius mistook it for that singular substance discovered by Pettenkofer, which has been thought by Dr. G. Bird, to be a transition formation between urea and uric acid. It had been stated, that urate of soda was a secretion peculiar to gout; Dr. Macleod has shown, that in capsular rheumatism the articular cartilages are seen covered with it. Dr. G. Bird also narrates a case where, in a case of rheumatic gout, an eruption was frosted with microscopic crystals of urate of ammonia. In a case which came under my notice some years since, urate of soda was deposited on the valves of the heart. The patient had had rheumatism, but never gout. The curious fact of the connexion of rheumatism with granular disease and other renal affections should also be borne in mind. Rayer observes, that the solid matters of the urine are diminished in quantity, and are found to exist in the blood and in the serous effusions; Drs. Prout and Christison state that rheumatism is a very common and troublesome concomitant; and, "according to my observations in such cases, the lithates are most strikingly deficient." There is evidently a large and undue existence of lithic acid or its compounds in the system in these diseases. May not this deposition, then, occasion such an extent of acrimony in the fluids of the body as to irritate and excite to a morbid action the lymphatics and minute terminations of the arteries in the several parts of the body, and not improbably of the lining membrane of the larger arteries; becoming, in fact, a source of irritation wherever deposited; more especially in parts such as the joints and sheaths of the ligaments and tendons, which, being inextensible, would sooner probably become affected by such distempered excitability? If this theory of the diseases were correct, the physiology of the beneficial action of the phosphate of ammonia is simple. On being taken up into the system, it meets with the uric acid and urate of soda. Two very insoluble matters becoming decomposed, two very soluble salts are formed—the phosphate of soda and urate of ammonia. This is not all the aid we get from the remedy, for the former, according to the valuable researches of Baron Liebig, has the power of rendering uric acid soluble with facility in water. By these means the free and combined uric acid existing in the system in these diseases will be dissolved, and rendered capable of easy elimination by the kidneys. I have used this remedy with most beneficial effect in almost every form of gout and rheumatism. Before employing it, I preface its use by a purgative of calomel and colocynth, or of some other aperient, and in acute articular rheumatism, have recourse to local and general antiphlogistic means when the disease is severe. Under its use, the tendency of the disease to attack fresh joints diminishes, the chronic form so frequently left behind by the acute, and which is so difficult to cure, is obviated, and, when existing, has yielded commonly in a few days. The phosphate was found eminently useful in some of those cases of a local character, which bear a resemblance to neuralgia. In gout, the early use of the salt was found most generally to ward off an attack. In fifteen cases of rheumatic fever treated by me with the salt, no heart affection had taken place in any. When it is remembered that heart complication generally has taken place in about one-fifth of the cases of this fever, this fact is worthy of deep consideration. In asthenic gout, it has been of the highest benefit; and in those cases where an obstinate swelling is sometimes left behind from an attack, it has been the most certain remedy.

The efficacy of this salt as a solvent of chalk stones, checking the localisation of these concretions, as well as arresting their increase when forming, is remarkable. It is useful also in the treatment of lithic acid gravel, and I think it possible it may be found available in calculi of that nature, as well as in the early stages of others, considering how frequently uric acid forms their nucleus. I have given it a comparative trial with benzoic acid and phosphate of soda, neither of which I have found so useful.

This salt has also been used as a lotion in gout, with good and soothing effects. The employment of this, or any other solvent, although it may relieve, is however not all that is to be desired. If dyspepsia be prominent, and the digestive organs cannot assimilate the usual quantity of nitrogenized food which is introduced into them, it should be lessened; as likewise in those cases where too great a quantity is taken and assimilated, compared to that which the waste of the system requires. It should not also be forgotten, that the arrest or diminution of the cutaneous excretion is sometimes a cause of this deposit in the system; and, although this salt be recommended as a valuable solvent, where uric acid exists in the system, yet "prevention is better than a cure," and great stress should be laid upon paying due attention to the various functions connected with the primary assimilating processes, upon which the excess of uric acid and its compounds is generally considered to depend. Both are points of the highest importance, and should not be lost sight of in the medical and hygienic treatment of gouty and rheumatic patients.

(a) For the sake of ascertaining the doses whilst at the Sea-bathing Infirmary, I gave the cod-liver oil (the common oil of commerce) in quantities varying from 3j. to 8 and 12 fd. oz.

PROGRESS OF MEDICAL SCIENCE.

FRANCE.

[Paris Correspondence.]

NEW MODE OF PERFORMING THE CÆSAREAN SECTION.

Nature is a surgeon as well as a physician, and sometimes points out the way in which art should proceed for the removal of accidents that do not admit of cure. In many cases of difficult labour, from deformity of the pelvis, the vagina has been lacerated at the superior part, and the child has thus passed into the cavity of the abdomen. M. Baudelocque proposes to imitate this process. The posterior wall of the vagina should be divided to the extent of two inches, from the neck of the uterus downwards. The case is then to be left to nature; the uterine contractions will not fail to expel the child through the vagina into the cavity of the abdomen, whereon the linea alba is divided, and delivery completed. The placenta is to be removed in the ordinary way through the vagina.

CHOLERA FROM A GRAVE-YARD.

In my last letter I noticed an excellent paper by M. Pellarin on the cholera at Brest. M. Pellarin has, since the date of his recent communication to the Institute, become acquainted with the following facts, which he has thought of sufficient importance to be placed, as a supplementary memoir, before that learned body.

Six months previously to the general outbreak of cholera in the department of the Cotes-du-Nord, the disease had appeared in the small village of Pouldaron, in the same department. The first localities attacked did not, in fact, exhibit any trace of the disease before the month of October, while in Pouldaron two cases had occurred on the 10th April; from that period to the 23rd May, out of 800 inhabitants, 113 were attacked, and 36 died. Dr. Kerambrun, who treated the patients, explains the cause of this premature attack. The grave-yard was being disturbed at this period, and many bodies, in a state of putrefaction, were all but exposed. The first person attacked by the cholera was a woman who occupied the house nearest to the cemetery; and the workmen employed in the grave-yard were the next attacked. It is difficult to find a case more satisfactorily made out than this, for it was clearly ascertained that the disease had not been imported into the locality by any affected person. Indeed, it did not make its appearance in any other part of the department until six months afterwards.

LIQUEFACTION OF GASES.

M. Berthelot has recently discovered a very simple and ingenious mode whereby the liquefaction of gases may be demonstrated during a course of chemistry. A barometer-tube is closed at one end and drawn out to a point at the other; it is then filled with mercury in the usual manner; the tube is then placed horizontally in a sand-bath, and the open end placed in a larger tube, furnished with a cork, and communicating with an apparatus which gives off the gas intended to be liquefied. Heat is now applied, the mercury dilates, and a portion of it escapes from the tube. When the latter has acquired the precise heat of 50° C. for some time, it is allowed to cool; the mercury contracts, and the vacuum is filled by the gas. After complete cooling, he tube is removed, and its open end closed with a spirit lamp.

To demonstrate the fact of liquefaction, the tube is now heated in a sand-bath to 58 or 59; the gas, which is compressed by the dilated mercury, becomes soon liquid, but recovers its gaseous state as cooling sets in. A whole class may be enabled to see the change to the liquid state by means of the gas microscope.

The above process has been applied to carbonic acid gas only. M. Berthelot proposes experimenting on oxygen, hydrogen, carburetted hydrogen, &c. As yet, however, his experiments have all failed; inasmuch as the tubes, though having a thickness of wall nearly fourteen times greater than their diameters, gave way under the pressure, which M. Berthelot estimates at 780 atmospheres.

RICORD'S FORMULÆ FOR THE TREATMENT OF SYPHILIS.

NON-VIRULENT AFFECTIONS.

Balanitis.

Inject between the glans and prepuce, thrice a-day, the following:—Nitrate of silver, 2½ scruples; distilled water, 100 scruples.

Abortive Treatment of Gonorrhœa.

Inject once:—Nitrate of silver, 10 grains; distilled water, 1 ounce.

Take one-third of the following powder daily:—Cubebs, 1 ounce; alum, 1½ scruple.

Injection for Gonorrhœa, when the period for cutting it short (abortive) has passed by.

Inject the following three times a day:—Sulphate of zinc, acetate of lead, *a a* 15 grains; rose water, 6 ounces.

Internal Treatment of Gonorrhœa.

Take a spoonful of the following emulsion three times a day:—

Copaiba, syrup of tolu, and syrup of poppies, *a a*, 1 oz.; mint-water, 2 oz.; orange-flower water, ½ oz.; gum arabic, *q. s.*

Acute Period of Gonorrhœa.

Twenty leeches to the perinæum, to be followed by the warm bath, rest in bed, complete abstinence from food, suspensory bandage. To take one of the following pills four times a day:—Expressed and evaporated juice of the lactuca sativa; camphor, *a a*, 2½ scruples. Divide into twenty pills.

Chronic Discharge.

Inject the following three times every day:—Alum and tannin, *a a*, 10 grains; rose-water and Roussillon wine, *a a*, 6 oz.

VIRULENT AFFECTIONS.—PRIMARY.

Abortive Treatment of Chancre.

At any time within the first five days after contagion, destroy the chancre with Vienna caustic.

Regular Non-indurated Chancre.

Dress the sore frequently with aromatic wine; great cleanliness; cauterize occasionally with the nitrate of silver; rest; emollient drinks; if inflammation exist, then purgatives, antiphlogistics, and emollient applications. (No mercury.)

Indurated Chancre.

Dress the sore thrice a day with the following:—Calomel, 4 scruples; simple cerate, 1 ounce. (Mercury internally.)

Phagedænic Chancre.

Cauterise the sore completely with the nitrate of silver, the acid nitrate of mercury, the potass and lime, or a hot iron, according to circumstances. Afterwards apply in lotion, aromatic wine, 6 ounces; extract of opium, 3 grains; or aromatic wine, 6 ounces; tannin, 1½ scruple. In cases of scrofulous diathesis, give internally tartrate of potass and iron, 1 ounce; distilled water, 8 ounces. One ounce three times a day. Dress the sore with tincture of iodine, 4 scruples; distilled water 6 ounces; or employ the sulphur ointment and sulphurous baths.

Abortive Treatment of Bubo after Non-indurated Chancre.

Cauterize the bubo for ten minutes with the potass and lime caustic, and allow the eschar to come away.

Bubo after Indurated Chancre.

Antiphlogistics, if necessary; evacuate the pus with caustic potass; then destroy gradually the glandular mass at the bottom of the open sore with caustics. After each cauterization, apply a poultice and an ointment made of equal parts of extract of belladonna and mercurial ointment.

Horse-shoe and Sloughing Bubo.

For the former, the same treatment as before. For the gangrene, apply in lotion chloride of calcium, 1 ounce; distilled water, 3 ounces; or, a powder composed of equal parts of powdered charcoal and cinchona bark.

In Scrofulous Complications,

Take the following emulsion, in three doses:—Iodine, 3 grains; oil of sweet almonds, 1 ounce; emulsion of ditto, 3 ounces; gum arabic, *q. s.*

Secondary Syphilis.

Take daily three wineglassesful of a decoction of saponaria leaves, with a spoonful of the compound syrup of sarsaparilla in each. Take, also, one of the following pills daily:—Proto-ioduret of mercury and inspissated juice of lactuca, *a a*, 3 scruples; extract of opium, 5 grains; extract of cicuta, 6 scruples. Divide into 60 pills.

Mercurial Stomatitis.

Gargle thrice a day with the following:—Decoction of lactuca, 5 ounces; honey, ½ ounce; hydrochloric acid, 15 drops.

Mucous Patches in the Mouth.

Gargle thrice a day with decoction of cicuta, 6 ounces; bichloride of mercury, 3 grains.

Vegetations.

Powder them with the following twice a day:—Savine powder, oxide of iron, and calcined alum, *a a*, 4 scruples.

Tertiary Syphilis.

Three times a day a glass of the decoction of saponaria. In each glassful, a spoonful of the following:—Syrup of sarsaparilla, 1 pint; ioduret of potassium, 1 ounce.—*Gaz. des Hôpitaux*, No. 18.

IRELAND.

[Dublin Correspondence.]

TREATMENT OF STRICTURES.

In a somewhat interesting course of lectures in process of publication by Dr. Hughes, of the Jervis-street Hospital, he seems very much inclined, in common with all our best Dublin Surgeons, to agree with Mr. Syme, of Edinburgh, in the impression, that very few, if any, strictures of the urethra are really impermeable. The well-informed surgeon, he says, will seldom find operation necessary; perseverance, and a proper knowledge of what he is about, being the only things necessary to overcome all difficulties. In a somewhat oblique way, however, of proving the fact and of demonstrating the rule,—perhaps, by the exception,—Dr. Hughes gives a case where he operated, much after the manner laid down by Mr. H. Smith lately in the columns of the *Medical Times*—the stricture, on cutting into it, proving to be of cartilaginous hardness. It is not my intention to add anything to the opinions of Mr. H. Smith, or the graphic account of this disease, given at page 335 of the present volume, by that observant Practitioner, or to add to those very striking cases he has given. I should merely hint that, in all cases of this kind, we perhaps too often lose sight of the old-fashioned division of strictures into spasmodic and permanent. There is no necessity, possibly, of going all the way John Hunter did, in maintaining the muscularity of the lining membrane of the urethra,—a doctrine that has few adherents in the Dublin school, or, indeed, anywhere else; many of the usual circumstances met in practice favouring this view, being more properly referrible to the muscles in the perinæum. In chloroform we have now a powerful agent for testing the matter. Strictures anterior to the bulb of the urethra are, of course, not likely to be influenced by chloroform; but when we recollect, that by far the most frequent site of the disease is behind the bulb, and that not unfrequently both parts of the urethra are engaged, the better-informed of our Irish school expect to do quite as many wonders as our Edinburgh brother. The pyramidal, or olive-headed catheter, tapering to a blunt point, promises to be of very great service. The employment of caustic, as put forward by Mr. Wade, I am not so sure about; the potassa fusa at least, must be reserved as a last resource, the ordinary nitrate of silver being substituted for it.

GALLIC ACID IN HÆMORRHAGE FROM THE BLADDER.

Has proved of very essential service, in the hands of Dr. Hughes. In cases of enlarged prostate, and in others. Where injury of the bladder or urethra brings on bleeding into these parts, he gives three grains of this powerful astringent, at short intervals, with the best effects. In the old operation, of perforating a stricture with a stilet, as practised by Mr. Stafford, considerable hæmorrhage took place; and even yet, with the conical-headed sound, we are not free, perhaps, from this accident. In the gallic acid, we are furnished with a specific of considerable value. Sir Astley Cooper, it will be recollected, met with a case of the sort, which resisted everything then known, till he divided the artery of

the bulb. In cases of enlarged prostate, too, a varicose condition of the veins of the part exists, to which Hughes draws attention. The application of cold, with rest, and the steady exhibition of gallic acid, however, will check the most obstinate bleeding. In the less manageable cases of enlarged prostate also, much experience has been acquired among Irish Practitioners. It is a disease, I need scarcely say, most common in the decline of life, compressing the parietes of the urethra, and distorting its channel. It seems to resist all treatment; indeed, like all organic diseases, we can at best but palliate the main symptoms, and give general rules of diet and management. These are well laid down by Hughes. In cases where any suspicion of syphilis exists, a mixture, much used in Dublin, of tartrate of iron, and all but imperceptible doses of tr. iodine, will prove serviceable: where we have retention of urine, I believe there is no remedy but the catheter. As to the best sort of instrument to be used, whether silver or gum-elastic, we have, of course, all shades of opinion,—the gum-elastic, perhaps being preferable;—a full-sized gutta percha, or gum-elastic instrument, with a large wire and handle, being sufficient for all purposes. Where the middle lobe of the prostate is engaged, Hughes, in common with other Dublin Hospital Surgeons, has recourse to the plan of keeping the handle of the instrument close to the left groin, till it gets up to the prostate; he then draws it forward at right angles to the pubes, and gently depresses it, further tilting it over the obstruction, if necessary, by a finger in the perinæum or rectum. This manœuvre seldom fails to get the instrument into the bladder.

DR. WYLDE AND THE "QUARTERLY."

The triumph of the indefatigable and gifted ex-editor of the *Quarterly*, in the late trial in which he was engaged against Messrs. Smith, Clibborn, and Co., has given universal satisfaction in Dublin. Busily engaged at present in founding a school of Ophthalmic Surgery on the ruins of the old Park-street school, it must be a matter of peculiar satisfaction to Dr. Wylde, to find his services in the advancement of professional and general literature in Ireland thus recognised. The time of one so busily engaged in practice, and one who so ably conducted our only Irish scientific *Quarterly*, should not be measured, as it was sought to be, by a mere mercenary standard. It is to be regretted the thing came before the public at all, and it is now to be hoped the whole sum in question will not be swallowed up in law.

WARDROP ON THE HEART.

We have received an intimation from the Author that he has nearly brought this valuable Work to a close. As soon as the M.S. is put into our hands, it shall be printed, and the sheets will remain at our Publisher's, to be supplied, on application, to our Subscribers.

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THE MEDICAL TIMES.

SATURDAY, JUNE 29, 1850.

QUACKERY, like the camomile plant, blooms the more vigorously the more it is trodden down. In every form that knavery can beget or folly tolerate, the pest rears its hydra heads. Some of these occasionally slough off, or are removed by a more speedy process; occasionally a few are lopped off by an Act of the Legislature, or strangled by the giants of the Press; but the foul monster generates them anew, and continues to fatten on the vices and weaknesses of a too tolerant community.

It must be admitted that in quackery the elements of duration are innate. It accommodates itself to the fashions of the day, and to the changeful spirit and taste of the age in which it and we live. The goddess of eternal Mutation presides over its destinies. It seems to be a law, that the organized creation, whether animal or vegetable, shall only continue to exist by undergoing perpetual change, like the earth and air on which it depends for support. The farmer drives his plough, amid the wolds of which the iguanodon was once undisputed master; and the porpoise flounders in the bays and estuaries which of yore were devastated by a race of all-devouring hideous brutes, half snake, half fish—the spawn of a world emerging from the chaos of ages.

Such seems to be the law, and such the result. Those Institutions which have ever held their own, have faded away like their founders; and those which have lived for each and every, age survive, and may do so as long as they follow the same plan. Quacks have been wise enough to see this, and have profited by the observation. Every new discovery, every fresh invention, has been adopted by their pliant and subtle minds; but it was reserved for the nineteenth century to give birth to an apparition of quackery, before which the other unclean spirits, however potent in their particular realms, must veil their brows, and acknowledge their inferiority. Until Willis Mosely arose, no man ever dreamt of quacking gratis,—of practising his art solely out of love for his own species.

The Rev. (!) Dr. Willis Mosely, after enumerating the fees he has received for "nervous cures"—among which said fees are one of 250*l.*, and "Sir Walter Raleigh's first snuff-box, presented to Queen Elizabeth,"—says: "And these things are named, not to induce others to follow the example"—No! So far from this, he will accept no more!! with the salvo that patients can be supplied with "the means of *cure*" in packages of 10s. 6d. up to 3*l.* 3s., with advice gratis!—

"The price of the latter for both is enough."

In future ages, the bewildered historian of our days will pause to inquire how the Rev. Doctor came by a royal snuff-box; but the Practitioner of the present time will contemplate the results of such extraordinary proceedings. He will ask if Dr. Mosely has a living—if he stands under the domination of a bishop, whether the latter cannot suspend him, and whether it is not high time that the Legislature empower magistrates to send at once these advertising parsons to the tread-mill.

When Homer tells us in his lofty notes, that "Achilles leaps as far as arrows bound,"—a leap we have often admired as the greatest feat of agility on record,—we bow with involuntary admiration at the shrine of his unparalleled boldness, and the more reverence his genius. When the *Times* astonishes us with some political fabrication, equally unfounded, our feelings are somewhat akin, though dimmed by a hazy idea of Austrio-Russian notes. Reader! Dr. Willis Mosely is the Homer of quacks. You may look into their puffings in all ages, from the days of Paracelsus to our own time, and admire the ingenuity which has been displayed in assuming—now the guise of philanthropy, and now that of science. Never in the past or in the present will you find a man like the Rev. Dr. Willis Mosely; but oh! luckless consummation of human frailty—the physic is sold at Three Guineas the Case!

THE ELECTION TO THE COUNCIL OF THE COLLEGE OF SURGEONS.

We are authorised by Mr. Grainger to announce, that it is not his intention to be nominated for a seat in the Council of the Royal College of Surgeons at the forthcoming election. Thus one candidate is removed from the field. Our remarks, last week, conveyed plainly enough our opinion of the claims of certain other Members to a seat in the Council; and before another week will have elapsed, the Fellows will have given their votes and exalted the favoured Candidates to a high station of dignity and honour in the Republic of Medical Science.

We hope that the result will be alike honourable to the Candidates and to the Profession. The highest offices should be filled by the best men; for the Council of the College of Surgeons is the representative, to the scientific world, of the progress and state of Surgery in this country, and whatever impairs the lustre of this Institution, or degrades its fame in the estimation of Europe, is a blow to the whole Profession at home. We have no doubt that the elective principle will justify itself by appointing such men as deserve the confidence and respect of their brethren.

THE ABOLITION OF THE CUSTOM OF INTRAMURAL SEPULTURE.

If pure disinterestedness and unflagging perseverance in an enterprise of public utility can entitle any man to the approbation of his race, there is none who has deserved more at the hands of the public than Mr. Walker. Inflexibly devoted to the abolition of the custom of intramural interments, indifferent to the sacrifices of time and money he was for the object's sake constrained to make, and estimating at their real value the reproaches and calumnies of selfish classes, he has applied all his powers with an enthusiasm not often exhibited, during a period of more than ten years, to the removal of one of the most pestilential and disgusting nuisances that have ever stained the morals, or endangered the health of the citizens of any country. This man is one of ourselves—a surgeon in full practice in the centre of this mighty metropolis. Under his very nose reeked the seething heaps of putrefaction he has exposed to public inquiry and horror: his own eyes witnessed, and we believe that his own health suffered from, the destroying effects of these consecrated abominations. Versed in the ætiology of disease, and in the mode in which putrefying organic compounds operate upon the living organism, his attention was directed in a peculiar manner to the injuries inflicted upon the

public by emanations from the passing remains of mortality, piled up, layer over layer, in the confined grave-yards of this city. Through his exertions a Parliamentary Inquiry was instituted for the purpose of ascertaining the facts incident to the custom; the Press roused to lend their advocacy to the cause; the curiosity and fears of the public awakened by the revelations he made; and, at last the Government induced to take the matter seriously in hand. By means of the usual machinery of Commissions and Boards, a sufficiently strong case for Parliamentary interference was established, and a Bill has at length passed through the Lower House for the final abolition of the practice of Intramural Sepulture in this Metropolis. This is a suitable time to do honour to the man who has most deserved public gratitude.

We cannot refrain from pointing out, that it is to the enlightenment afforded by *Medical science*, and to the labours of a *Medical man*, that the public owe this great social boon. Whatever may be hinted, we cannot believe that the Government, who represent the people of this country, will ignore the importance of our Profession and the claims of one of its most meritorious members, by neglecting to place the administration of the Act in the hands of a competent professional man. The Board of Health, in whom the powers created by this Act are vested, does not, as at present constituted, comprise a single medical member. Rumours are rife with reference to the possibilities of better things; but we heed them not, because we put no trust in official justice. A new Commissioner for the purposes of the Act will be appointed, and it is whispered that probably he will be a Medical man; but inasmuch as suspicion, in the House of Commons, fell upon Lord Ashley as the nominee of the Government to this office—a suspicion he felt it becoming his independence to protest against—we are afraid that the appointment will be given to some individual of higher pretensions than a member of our Profession. We hope not. If Mr. Walker cannot exercise sufficient influence to obtain an honourable recognition of his services, at any rate Dr. Southwood Smith should not be overlooked. If the Government appoint any but a Medical man to this office, the whole Profession will be outraged, and it ought to protest, as a body, against such slight and injustice.

The Poor-law Committee have marked Lord Ebrington, one of the Secretaries of the Poor-law Board, with their disapprobation; and it is probable that, before a long time elapse, that nobleman's salary will be considerably reduced, if he be not altogether relieved of his duties. The Profession might protest similarly, at any time, against appointments obnoxious to its interests and honour, and we are sure that the public, and its organ the House of Commons, would not be deaf to such representations.

MODEL LODGING-HOUSES.

As many of our provincial readers may often have heard of the Metropolitan Model Lodging-houses, but never have had the opportunity of seeing them, or of obtaining an accurate idea of their construction and arrangements, we shall take advantage of a Lecture recently delivered by Mr. Liddle, a member of our Profession, for the purpose of conveying some information respecting these mansions of the poor. As Medical men, interested in the physical welfare of the community, we must necessarily feel our sympathies engaged in favour of institutions promising to be conducive of much benefit to the health of the people; and, when we consider the probability that typhus as an endemic disease, in this metropolis, is fostered, if not produced, mainly by the incommodiousness and squalor of the abodes of the working-classes, we must rejoice that an effort has at length been made, by philanthropic men, to abolish one of the most pernicious evils incident to residence in great cities.

The institution to which Mr. Liddle's remarks chiefly refer, is confined solely to the accommodation of young unmarried men; but there are several others in London into which families are admitted. In this instance, there are in the building, a coffee-room,—partitioned off in the same manner as in the houses of public resort in large towns,—a common hall, and a library in progress of formation. The building is divided into floors, and the upper floors, in medical language, into wards, or dormitories. These bed-rooms are divided off, by means of partitions of wood reaching to within two or three feet of the ceiling, into several small apartments, containing a bed, a small closet for clothes, and a looking-glass. Underneath the closet there is a tube, communicating, through the wall, with the external atmosphere, and there is a valve at the end of the tube, which can be opened or closed, for the purpose of ventilation, at the will of the occupant. There appears to be scarcely privacy enough for comfort in this arrangement, but, on the whole, the Model Lodging-house is a vast improvement upon the present abodes of the operative classes. Mr. Liddle says:—

"The shareholders in the Association for Improving the Dwellings of the Industrious Classes, neither wish, nor is it in their power, to make a large profit out of the rents, as the Charter restricts the dividends to 5 per cent., and provides, that any surplus profits beyond that amount should go in extension of those objects which will benefit the tenants themselves.

"For the charge of 3s. a week an industrious man can here enjoy many luxuries which few tradesmen in London can partake of without considerable expense, and great personal inconvenience. For instance, a warm or cold bath can be had on the premises, at a moment's notice, for the trifling sum of 3d. for the former and 1½d. for the latter. Provident habits are encouraged among the lodgers. Each tenant may pay in 3d. or 6d. a week to the Superintendent, *with the rent*, without the trouble of taking it to an Insurance-office, *perhaps far distant*, while they have the security of an Insurance-office for the benefits they stipulate for, and have the same guarantee that their deposits will be handed over to the Insurance-office, as the Association have for their rent.

"The rules in this establishment are not stringent; but, on the contrary, extremely liberal. It is essential to the health, comfort, and well-being of the honest, hard-working man, that he should have his night's rest undisturbed, which he could not enjoy if persons created a noise by coming in at all hours of the night; but, in order to afford the tenants an opportunity of taking recreation, they are admitted into the building until twelve o'clock, and, on the payment of 2d., until one o'clock in the morning.

"Although there is a cook-shop on the premises, it is entirely optional for the tenants either to purchase their provisions from the cook-shopman, or provide them for themselves elsewhere; and, in order to enable them to preserve any portion of their food which is not consumed at each meal, a meat-safe is provided in the basement for each man, with separate lock and key, and the cook-shopman will furnish every man with cups, saucers, plates, tea-pots, coffee-pots, and cooking utensils, without charge.

"There are also a library and commodious reading-room for the use of the lodgers; and a coffee-room, where some of the periodicals may be read without any extra charge.

"If, notwithstanding the universally condemned tax upon windows, or, in other words, upon light and air, the Association have not been deterred from erecting these dwellings, where every endeavour has been made to admit as much of both as is requisite for health, comfort, and convenience, it will be found, that, when this tax is repealed, and also the duty on bricks, the poor will be able to enjoy all the advantages which are here afforded at a cheaper rate. It is a mistake to suppose that the window-tax falls exclusively upon the wealthy. It may, perhaps, be so in the country; but in towns such is not the case; for many of the houses in this and the adjoining neighbourhood were formerly occupied by wealthy individuals, but now are let out in tenements to the poor; and, in order to avoid the tax, every window that can by any possibility be dispensed with, is bricked up.

"From my long experience among the poor in an adjoining parish, I may with confidence state, that ill health among the tenants is one of the principal causes of their inability to pay their rents; and, although it at first sight appears, from the high price at which many of the hovels are let, the landlords must derive a very high 'per centage for their capital, yet, from the numerous cases of poverty which are occasioned by ill health, a considerable portion of the rent can never be collected. It is, therefore, clearly the interest of the landlord to attend to the sanitary condition of his property; for, not only will he find it improved, by making those structural alterations which will conduce to health, but he will derive a more certain income from it. In consequence of the present formidable opposition, landlords of small tenements will now be compelled, in self-defence, to attend to the just demands of their tenants, and must endeavour to rival the exertions of this Society, if they expect to derive any rent at all from their premises. In short, "they must build up to them," (as Lord Carlisle observed on the occasion of the opening of the building,) "and must furnish those conveniences and comforts of which the Society has set the example." The industrious classes will no longer be contented, as hitherto, to live in buildings devoid of light, fresh air, and pure water. It is the duty, as well as the interest of the public generally, to promote the cause of sanitary reform. I have already stated, that diseases are not confined to the localities where they originate; but the inhabitants of the noble mansions in the spacious squares at the West End suffer, when an epidemic breaks out in the neglected districts of the Metropolis, and the ratepayers of the parish are heavily taxed by the increased burden occasioned by the numerous cases of sickness among the poorer classes, by the widows and orphans who claim relief, and by the increased number of criminals to be kept and prosecuted at the public expense. Let me urge on you, therefore, to be active in this sacred cause. You may, by example, by instructing the uninformed, by visiting your poorer brethren, by instigating parochial boards to cleanse more frequently the localities of the poor, and remove the nuisances which surround their habitations, greatly promote their welfare, and increase the well-being of the community. Lastly, I would say a few words to the industrious classes. It is you who are the persons most deeply interested in the important question we have been considering this evening. All the efforts which the Government, or associations, or the public, may make for your benefit, will be of no avail if you refuse the boon offered to you, or should even be unwilling recipients of it. You have it in your power to do much more for yourselves than you have hitherto attempted. Disease, suffering, and premature death are to be found amongst your ranks in a greater degree than in the ranks of the upper and middle classes. The average age at death among the gentry and professional persons is forty-four years, while the average age at death attained by you and your families is twenty-two, just one-half; but the laws of health are now better understood, and I believe, as I have elsewhere expressed, that the same duration of life may be extended to you as is at present enjoyed by the other classes of society. Let me earnestly entreat you not to rest satisfied with the present state of things, but use all diligence to procure an amendment in the sanitary condition of your houses and localities, for the enjoyment of a HOME must precede every other improvement in your condition. The possession of a home will in-

spire you with a feeling of self respect, and you will feel too proud to indulge in those sensualities which tend to degrade mankind, and the better informed among you will set examples of order, politeness, and regularity to your fellow workman while engaged in the factory or workshop, which will confer more lasting benefits upon your class than the lessons inculcated by the schoolmaster. Learn, therefore, to respect yourselves, and you will soon command the respect of others."

THE MEDICAL REFORM QUESTION.

The following notice and schedule have been addressed by the Council of the National Institute to the General Practitioners of Medicine, Surgery, and Midwifery in England and Wales.

Hanover-square Rooms, 4, Hanover-square,
June 24th, 1850.

Sir,—Five years ago the sentiments of nearly 5,000 General Practitioners were recorded in favour of a new and independent incorporation of the General Practitioners of this kingdom, and recent circumstances have rendered it incumbent that the opinions of the same class of the Profession should again be taken, on the necessity and expediency of this measure.

Having, by repeated communications with the Secretary of State for the Home Department, and with the Council of the College of Surgeons, fully ascertained the *impracticability* of *so altering* the constitution of the College as to render its arrangements acceptable to the General Practitioners throughout the country; and since any alteration that could be effected in the College of Surgeons would not meet the just complaints of the large number of Medical men practising legally, although not members of the College, the Council of the Institute consider that any further attempts to open the College must prove fruitless, as respects the main objects of MEDICAL REFORM, and that the only means of improving the status of the General Practitioners, and restoring peace to the Profession, would be by the establishment of an INDEPENDENT COLLEGE, giving to the General Practitioners the full control of the education of their members in Medicine, Surgery, and Midwifery, and enrolling, as one body corporate, in an Institution of their own, every General Practitioner of the kingdom.

In order again to ascertain the opinions of the General Practitioners on this vitally important question, you are earnestly requested to fill up and sign the schedule herewith transmitted, and to return it to me at your earliest convenience. I have the honour to be, Sir,

Your obedient humble Servant,
GEORGE ROSS, Secretary.

OBJECTS OF THE NATIONAL INSTITUTE OF MEDICINE, SURGERY, AND MIDWIFERY.

The principal objects of the Institute are, to maintain an effective organization of the General Practitioners—to expose, discourage, and suppress, by registration, and every other practicable means, illegal and unqualified practice—to employ all legitimate means for the purpose of urging upon the Government and the Legislature the claims of the General Practitioners of this country to corporate rights—to promote a high standard of education and qualification, with a satisfactory test, by efficient examination, for every individual authorized by law to practise Medicine, Surgery, and Midwifery—and to form, irrespective of the Special Colleges, an Institution comprising within itself the entire range of medical and surgical knowledge.

The body of General Practitioners includes:—

In actual practice as a General Practitioner.

- Every gentleman who was in practice previous to the 1st of August, 1815; and
- Every Licentiate of the Apothecaries' Society. Also,
- Every Fellow, or Member, of any Royal College of Surgeons in England, Ireland, and Scotland:
- Every Doctor or Bachelor in Medicine, of any University of the United Kingdom: and
- Every Fellow or Licentiate of any College of Physicians of the United Kingdom:

NOTE.—According to the principles of the National Association and of the National Institute, the Dispensing of Medicines ought not to constitute a disqualification for offices of honour and emolument. The Dispensing of Medicines must at all times rest with the individual, and must depend upon the circumstances under which he may happen to be placed with his patient and the public.

SCHEDULE.

	YES.	NO.
Are you desirous of a separate Incorporation of all the qualified General Practitioners of Medicine, Surgery, and Midwifery, in an Independent College of their own, upon the Elective principle, comprising within its own limits the entire range of Medical and Surgical science and practice, with the control of the Education and Examination of all future members?		

Signed _____

_____

Date _____

CORRESPONDENCE.

THE COUNCIL OF THE COLLEGE OF SURGEONS AND MR. PILCHER.

[To the Editor of the Medical Times.]

SIR,—I should not have felt myself called upon to notice the statement made in your last Number, in reference to my "fitness" to be re-elected upon the Council of the College of Surgeons, had it not appeared in your leading article; but issued with editorial importance, I might possibly by some be supposed to assent to the truth of the facts there stated if I passed the observation in silence. Though not aware of the extent of license permitted to an editor of a journal, I have a right to complain of the attempt to unfairly prejudice my position in the Profession by misstatements, the incorrectness of which could so easily have been ascertained.

Calculated as your remarks are to injuriously affect my practice of general surgery, as well as my probable position in the Council of the College, I feel confident, that in justice, you will allow to appear in your next Number the following statement:—I beg to state, that after a house-pupillage with the late so justly eminent Mr. Edward Grainger, I obtained the College diploma in 1824, and commenced as a private teacher of Anatomy and Surgery in the year following. In 1826 I demonstrated Anatomy in the then largest school in the metropolis, and in the succeeding year took an equal part with Mr. Grainger in the lectures on Anatomy and Physiology, which I continued to the year 1840. In the year 1836 I lectured upon the principles and Practice of Surgery, which lectures I have continued to the present moment. The Fothergillian gold medal was awarded to me for my successful Essay upon the Diseases of the Ear in 1838, and which was published at the request of the adjudicators. During this period I have furnished the various periodicals with essays and papers upon physiological and surgical subjects.

The style and manner of your observations upon my late connexion with Mr. Maule, permit me only to allude to them sufficiently to remind you, that in our Profession, be it right or wrong, it is a very common practice, as the examples of many, whom even yourself would not hesitate to pronounce as the "heads of our Profession," plainly testify. With yourself, Sir, I esteem the election by the Fellows to a seat in the Council as a most honourable proof of professional and social position, and therefore most highly to be prized; but it must not be forgotten, that in addition to professional eminence, the elected should be expected to carry to the Council Board a capacity and determination for honest and intelligent legislation, and more especially at this peculiar juncture.

I am, Sir, your obedient servant,
GEORGE PILCHER.

7, Great George-street, Westminster,
25th June, 1850.

[To the Editor of the Medical Times.]

SIR,—Feeling, as I do, in common with very many of the Electors of the Council of the Royal College of Surgeons, that you are evidently misinformed with regard to the qualifications of Mr. Pilcher, either as a Surgeon or a Councilman, I can assure you, from the best authority, that the past year of Mr. Pilcher's Councillorship has been fulfilled with the greatest benefit to the members at large, advocating as his principles all that is liberal. You style Mr. Pilcher an aurist; Mr. Pilcher is no more an aurist than Mr. Lawrence, or Mr. Travers, or Mr. Guthrie are oculists, and yet these gentlemen occupy without molestation their seats at the Council. Mr. Pilcher is a most excellent Surgeon; he is a good operator; has, at a great expense, collected one of the first private collections of morbid anatomy; and is known to some hundreds as a most successful lecturer at the present time upon Surgery; prior to which he lectured upon Anatomy and Physiology; and I really think you will find but very few in the Council who have, as Mr. Pilcher has, enjoyed so good a reputation as a teacher for upwards of twenty years. Pray excuse my trespassing upon your space; but I feel quite assured you will not hesitate to render this act of justice to a very excellent, amiable, moral, and talented Surgeon.

I am, Sir, your obedient servant,
Belgravia, June 25, 1850. PHARYNX.

[At great inconvenience we publish the above communications. It is right we should do so, since before another Number of our Journal will appear, the Council election will have been decided.—ED. *Med. Times.*]

HEALTH OF LONDON DURING THE WEEK, ENDING JUNE 22.

The present return happily shows a continuance of that low rate of mortality which has now been observed for many weeks, and which must be considered as favourable, when compared with what has prevailed in London at the same season in former years. The deaths in week ending last Saturday did not exceed 775. Taking corresponding weeks of ten previous years, the mortality was never so low, except in 1841 and 1842, and it rose in 1847 and 1849 to nearly 1,000 deaths; the average is 864, or raised in the ratio of supposed increase of population 943; the deaths last week were therefore less than the latter number by 168.

MORTALITY TABLE.

Deaths in the Week ending Saturday, June 22, 1850.
(Metropolis.)

CAUSES OF DEATH.	Total.	Average of Ten Weeks.
ALL CAUSES	775	863
SPECIFIED CAUSES	772	859
Zymotic (or Epidemic, Endemic, and Contagious) Diseases	161	189
SPORADIC DISEASES:		
Dropsy, Cancer and other Diseases of uncertain or variable seat	52	45
Tubercular Diseases	149	181
Diseases of the Brain, Spinal Marrow, Nerves, and Senses	91	112
Diseases of the Heart and Blood-vessels	27	26
Diseases of the Lungs, and of the other Organs of Respiration	106	94
Diseases of the Stomach, Liver, and other Organs of Digestion	51	61
Diseases of the Kidneys, &c.	11	9
Childbirth, Diseases of the Uterus, &c.	8	9
Rheumatism, Diseases of the Bones, Joints &c.	7	6
Diseases of the Skin, Cellular Tissue, &c.	1	1
Malformations	...	2
Premature Birth and Debility	24	20
Atrophy	20	15
Age	34	43
Sudden	7	11
Violence, Privation, Cold, and Intemperance	20	24
Causes not Specified	3	5

The following is the number of Deaths occurring from some of the more important special causes:—

Apoplexy	21	Heart	26	Phthisis	102
Bronchitis	43	Hooping-cough	28	Pneumonia	47
Cholera	0	Hydrocephalus	24	Scarlatina	19
Childbirth	3	Influenza	1	Small-pox	16
Convulsions	29	Liver	12	Stomach	5
Diarrhœa	18	Lungs	2	Teething	3
Dropsy	18	Measles	16	Typhus	40
Erysipelas	4	Paralysis	14	Uterus	5

BIRTHS AND DEATHS.

	Births.	Deaths.	Births over Deaths.
Males	740	394	346
Females	690	381	309
Total	1430	775	655

METEOROLOGY OF THE WEEK.

Day.	Difference between the Mean Temperature of the day and the same day on an average of 7 years.	Mean of Thermometer. Dry.	Ditto. Dew Point.	General Direction of Wind.		Amount of Horizontal Movement of the Air.	Rain in Inches.	Electricity.*
				A.M.	P.M.	Miles.		
Sunday	8·6	52·6	40·0	N.N.E.	N. to S. passing E. N.E. & W.	5	0·00	Positive; electricity was exhibited occasionally.
Monday	5·2	55·8	46·7	S.	S.W.	30	0·05	No electricity was shown at the times of examination.
Tuesday.....	0·7	61·5	45·3	W.S.W.	S.W.	80	0·00	Positive and active electricity was shown during the day.
Wednesday.	1·8	62·5	52·0	W.S.W.	N.N.E. & S.E.	15	0·00	At the time of examination no electricity was shown.
Thursday ...	5·6	66·1	52·4	S.E.	Var.E.toS.	25	0·00	Positive electricity was shown during the afternoon hours.
Friday	7·8	68·3	54·6	Var. S. to N.W.	W.S.W.	160	0·00	Positive electricity was shown during the whole day. It was generally weak.
Saturday ...	7·6	68·0	55·0	W.S.W.	W.	85	0·00	Positive and weak throughout the day.
Means ...	1·4	62·1	49·3	Var.		SUM 340	SUM 0·05	

*In this Column, A. stands for Active; N. for Negative; and P. for Positive.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS.—The following gentlemen having undergone the necessary examinations for the diploma, were admitted members of the College at the meeting of the Court of Examiners on the 21st:—Messrs. William Thomas Sampson Ingram Hardy, Albany-road, Camberwell; William Spence Brown, Strood, Kent; James Thomas Hillier, Ramsgate; Alfred Freer, Stourbridge, Worcester; Samuel Richard Grammer, Islington; Henry Wilkin Jones, Calcutta; Alfred Thomas Brett, West Moulsey, Surrey; Nathaniel Philip Betts, London; Richard Sloper, Pontypridd, Glamorganshire; Charles Harrison, Kennington-road; and Samuel Knaggs, Clapham.

APOTHECARIES' HALL.—The following are the names of gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, June 20, 1850:—Hastwell Thornton, Cottingley-house, Bradford, Yorkshire; George Brown Turner; Robert Batty, Liverpool; Thomas Howarth Cockcroft, Keighley, Yorkshire; William Cooper, Bristol.

ROYAL COLLEGE OF PHYSICIANS—The following gentlemen have been elected Fellows:—Dr. Basham, Dr. Peacock, Dr. Herbert Davies, Dr. G. Johnson, Dr. Acland, (Oxford,) and Dr. Ormerod. The Censors chosen for the year are—Dr. Mayo, Dr. Barker, Dr. Barlow, and Dr. Jeaffreson.

ROYAL MEDICO-CHIRURGICAL SOCIETY.—A special meeting of this Society is called for Thursday, July 11, at six o'clock, to receive a Report from the Council, on the alteration and repair of the house in Berners-street.

APPOINTMENTS.—We have great pleasure in announcing the election of Dr. John Thomas Arlidge as resident Physician to the St. Luke's Lunatic Asylum, in the vacancy occasioned by the resignation of Mr. Nash. Dr. Arlidge was formerly student in Human and Comparative Anatomy to the Royal College of Surgeons.

YEOMANRY APPOINTMENT.—WEST SOMERSET REGIMENT OF YEOMANRY CAVALRY.—Robert Russell Sewell, M.D., to be Assistant-Surgeon, vice Haviland, resigned.

SIR DE LACY EVANS has a notice of motion on the books of the House of Commons, to ask the First Lord of the Treasury a question regarding the honorary rewards for important services in past wars, promised to be conferred some months back on naval and military medical officers.

CAPTAIN BOLDERO has also a notice of motion, to ask the First Lord of the Admiralty what steps have been taken in consequence of the vote of the House (8th of April) which declared, that the accommodation provided for the Assistant-Surgeons on board Her Majesty's Ships of War, is inadequate and insufficient for securing the full benefit of their professional services.

OBITUARY.—On the 17th of December last, at sea, on his passage to Australia, Dr. M'Mullin, Deputy Inspector-General, Army Medical Department. Lately, John B. Weir, Esq., Surgeon, Galashiels, from fever, caught in the performance of his professional duties. On the 17th inst., at Appleby, Westmoreland, George Thwaites, M.D., aged 54.

YELLOW FEVER.—The French Government are about to send three surgeons, of the 3rd class, to La Plata, where yellow fever is raging and proving very fatal.

SANDS COX *v.* MIDLAND COUNTIES RAILWAY.—A measure has been brought into the House of Commons by Mr. Newdegate, Mr. Richard Spooner, and Mr. C. B. Adderley, to provide medical assistance in cases of accidents on railways. The preamble of the Bill recites, that, whereas an action is now not maintainable against a railway company by a surgeon called in by the servant of a railway company, to render assistance to a passenger who has been accidentally injured, it is right and expedient that oftentimes the company in such case should be answerable for the services of the surgeon called in. *It then proposes to enact, that the servants of railway companies may call in surgeons in cases of accident,—the acts of the servant to bind the railway company, until notice is given to the medical attendant to the contrary.* A railway company may recover expenses from other railway companies in fault; and in case of a pauper passenger, the company is to have a legal right to recover from the overseers of the parish in which the accident happened. *The Act, it is proposed, shall be affixed at every station along railways.*—*Birmingham Journal.*—[We regret to announce, that the Railways Accidents Bill has been rejected, on the second reading, by a majority of 55. As we had conjectured, the atrocious case in which Mr. Sands Cox was engaged, and was refused payment by the Directors of the Midland Counties Railway, he being also afterwards mulcted in heavy law expenses, led to the introduction of this Bill, and we deeply regret, for the sake of the Profession, and for the security of the public, that an Act has not been passed, compelling railway authorities to pay for the medical assistance required by the victims of the negligence or ignorance of their *employés*. It must be done sooner or later.—ED. *Medical Times.*]

DR. ARTHUR FARRE.—On Monday last a memorial, very numerously signed by the students and former pupils of King's College, was presented to Dr. Arthur Farre, the Professor of Midwifery, by Samuel Griffith, A. K. C., late House Physician to the Hospital. Mr. Griffith remarked, that owing to the limit to the number of lectures on Midwifery, many subjects were but cursorily treated of in each course, while others were only given on alternate years; and it was probable that the new regulations of the Apothecaries' Hall would render further curtailment necessary. For this reason, though the students were desirous to see the whole course published, they were especially wishful to have those on the pathology and mode of treatment of the diseases of women and children; for though such works as Dr. Fergusson's and others had appeared, medical literature still seemed wanting in some book that would give a concise, and at the same time sufficiently elaborate view of these important subjects. They were desirous that such a book should be written by one so able and distinguished as Dr. Farre. Dr. Farre, after expressing his thanks for the compliment conveyed in the Memorial, stated, that he had often felt the difficulty alluded to. He would have much pleasure in complying with the wishes of the students by publishing the latter portion of his lectures, which he proposed dividing into four sections, viz.:—Diseases of the Unimpregnated Uterus, Diseases of the Puerperal State, those consequent upon it, and Infantile Diseases. Such a plan he considered preferable to publishing the whole of the course, of which, however, he intended to give a full, interleaved syllabus for the use of his class.

TO CORRESPONDENTS.

"A. S.," we observe, has applied elsewhere.

"A Country Reader."—Ants are easily dislodged, by pouring lime-water into their abodes, and easily poisoned by arsenic.

"A Hyp."—*Sanis omnia sana* is the best maxim. A celebrated physician used to instruct such patients concerning their diet, not to eat the fender or the fire-irons, for they were decidedly unwholesome.

"Studens."—Yes. It has been abundantly proved, that man is capable sometimes of enduring a very long abstinence. In an old number of "Hufeland's Journal" we remember a fatal case of voluntary abstinence for eighteen days; and Dr. Sloan, in the "Medical Gazette" for Nov., 1835, relates a case of abstinence incurred for twenty-three days in a coal-pit. There are very many apocryphal cases of this kind; and that in the neighbourhood of the Middlesex Hospital, as related by our Correspondent, may be of the number.

"A. F. W. J."—Most decidedly not.

If "Senex" will favour us with his name and address, we will obtain for him the information he requires.

"A. B., Liverpool."—We shall be glad to receive the case; but why without your name? The most complete treatise on acephalous monsters is by Tiedemann.

"Revenons à nos montons" may be translated, "stick to your own concerns,"—a suggestion we recommend to our Correspondent's consideration.

"Mr. J. C."—Child crying before Birth.—We will not trouble "Mr. J. C." for the details of this case, of which numerous instances are on record. It would seem, however, that in *all* cases of uterine crying where the head had not reached the vulva, there had previously been a discharge of water; and also that, in *most* cases of this description, manual attempts had been previously made to effect delivery.

Schaufian's Balsamic Plaster is much used in Russia for the cure of rheumatism. The proprietor received 30,000 dollars for revealing the secret of its formula, which is as follows:—℞ Ol. Olivæ. lb. iij.; saponis; pulv. cerussæ venet.; pulv. sulph. hydr., aa. lb. j.; pulv. camphoræ, ℥iij.; pulv. castorei ℥ss. Misce.

"Inquirer."—The Royal Dublin Society is one of the most useful societies with which we are acquainted; differing from the Royal Societies of London and Edinburgh, to which the Royal Irish Academy corresponds, it rather occupies the position of an institution for the diffusion of useful knowledge in a popular form. Lectures are delivered during the year by the Professors, men distinguished in their own departments of science; these courses are open to the public, and are well attended. There is a valuable library, which is available by the introduction of a member; a botanic garden, which is equally easy of access; and a show of cattle, agricultural produce, and implements, takes place annually. We wish societies of this description were more common.

"Tyro."—The largest fee on record is that received by Mons. Felix. He operated for fistula in ano upon the Grand Monarque Louis XIV.; his fee was £6000.

We shall certainly resume, in our new series, our papers upon Public Hygiene, which, we are happy to learn from our Correspondent, have given satisfaction to himself and his friends. It has been well said, that whatever affect the morals and happiness, as well as the health, of the community, are legitimate objects of study to the medical man:—"Quicquid agunt homines—votum, timor, ira, voluptas," all come within the pale of his contemplation.

Medical Biographies.—We regret we do not think it meet to comply with our Correspondent's wishes—although nothing would be easier. The following quotation is so apt, that our Correspondent must receive it as our reply to his suggestion:—"Cotemporary or living biography," says Dr. Johnson, "has never succeeded to any great extent. The reason is obvious. The lights and shades of living characters cannot be faithfully portrayed, without great risk and inconvenience—except anonymously, and then it is generally a caricature. When the biographer is acknowledged, the character of the individual is, almost necessarily, overlaid with eulogy, the virtues are all placed in the foreground of the picture, and the defects in the shade. It is very different when 'the dull, cold ear of death' no longer listens to panegyric or censure. The biographer may then delineate the character, praise the virtues, censure the vices, and criticise the writings of the departed, without fear or reproach."

"Philalethes."—It is impossible to state with certainty when the question of medical reform will be brought before the House; in all probability not this Session. With regard to our Correspondent's last question, he would incur a risk, in case any of his professional neighbours should lay a complaint against him, providing he visited medical cases and dispensed medicines for them. The mere keeping an open surgery does not involve any one in the pains and penalties of the Act of 1815; prescribing and dispensing medicines for the sick are requisite to render any one liable to fine or imprisonment. Our Correspondent must bear in mind, however, that any person may proceed against him before two magistrates for a misdemeanour, or a summary mode of recovering the fine may be had recourse to in the county courts.

"Sunday Reader."—We highly approve of the sketches on health in the "Examiner." They are too original and graphic not to find their way into the shape of a book: when they do, we shall review them.

"N., Tottenham."—Delivery generally takes place at the time when the tenth menstrual period should occur; hence the average time of that period in the unimpregnated state before marriage, in each case, will be a useful indication. Read Denman and Churchill.

The gentlemen whose communications are not alluded to in our Notices to Correspondents, will understand that their several letters will receive early insertion.